

Advantage



Operation flow



QC detection process

Package check

MS checking standards

Label check

Chip appearance inspection

Verification with official data

Pins/used-pellet inspection

Bend angle detection/ Oxidation detection/

Missing ball detection/ Pressured ball detection

Reel tray

Pipe inspection

Testing organization from the third party

CECC testing center

White Horse Laboratories

Ceprei Certification Body

Visual inspection

Acetone test / microscope magnification

50x inspection / locating hole inspection

/ scratch test

Service Field

Automotive
electronics

Medical
facilities

Consumer
electronics

Intelligent
field

5G
application

Industrial
control
equipment

Network
communication

New
energy
resources

Active component

ALTERA

XILINX®

ANALOG
DEVICES

SGS-THOMSON
MICROELECTRONICS

TEXAS
INSTRUMENTS

ATMEL

NXP

infineon

SEMIKRON

IOR

ON

maxim
integrated™

Passive component

SAMSUNG

muRata
INNOVATOR IN ELECTRONICS

YAGEO

TDK®

FH 风华高科
FENGHUA ADVANCED

UR UNI-ROYAL
厚聲集團

Active component



EP3C5E144C8N	EP4CE10E22C8N	EP4CE10F17C8N	EP4CE15F17C8N
EP4CE15F17I7N	EP4CE15F23C8N	EP4CE22F17C8N	EP4CE22F17I7N
EP4CE30F23C8N	EP4CE30F23I7N	EP4CE30F29I7N	EP4CE40U19I7N
EP4CE6E22C8N	EP4CE6F17C8N	EP4CGX150DF27I7N	EP4CGX15BF14I7N
EP53A8LQI	EPCQ16ASI8N	EPM1270F256C5N	EPM570T144C5N
EP11224008N	EP2C70F896C8N	EP3C16F256C8N	EP4SGX290NF45C3N
EP1C2040017	EP2C8F256C8	EP3C16Q240C8N	EPF10K10LC84-4N
EP1C3T144C8	EP2C8F256L8	EP3C25Q240C8N	EPF10K20R1208-4N
EP1C6Q240C8N	EP2C8Q208G8N	EP3C55F484C6N	EPM1270F2565N
EP1K30QC208-3N	EP2S180F 1020C3N	EP3C5F256C8N	EPM24010015N
EP1S20F780C7	EP3C120F484C8N	EP3C80F780C8	EPM3128ATC144-10N
EP2C20F48418N	EP3C120F780C7N	EP3C80F780C8N	EPM3256ATC144-10N
EP2C5T14418N	EP3C120F780C8N	EPASGX230KF4013N	EPM7512AEF1256-10



XC6SLX45-2FGG484C	XC7K160T-1FFG676C	XC5VLX110T-1FF1136	XCKU040-1FFVA1156I
XC6SLX45-3CSG324I	XC7K160T-2FBG484C	XC5VLX307-1FF665	XCKU040-1FBVA676I
XC6SLX45-3FGG484I	XC7K160T-3FBG676E	XC6SLX16-2FTG256C	XCKU040-1SFVA784C
XC6SLX25-2CSG324C	XC7VX1140T-2FLG1926I	XC6SLX9-2CPG196C	XCKU040-1FBVA900I
XC6SLX25-2FGG484C	XC7VX1140T-2FL1928I	XC6VLX195T-1FFG1156	XCVU190-3FLGA2577E
XC6SLX25-N3FTG256C	XC7VX1140T-1FL1930C	XC7VX415T-2FF1927I	XCVU190-2FLGB2104E
XC2V3000-4FG676	XC2S200E-6FGG456C	XC7VX415T-2FFG1158C4886	XC4VFX100-11FF1517C



STM32F030C8T6	STM32F072RBT6	STM32F103VBT6	STM32F105VCT6	STM32F407ZGT6
STM32F030CCT6	STM32F103C8T6	STM32F103VCT6	STM32F107VCT6	STM32F429IGT6
STM32F030F4P6	STM32F103CBT6	STM32F103VET6	STM32F303RBT6	STM32L431RCT6
STM32F030K6T6	STM32F103R8T6	STM32F103ZET6	STM32F405RGT6	STM8L052R8T6
STM32F030R8T6	STM32F103RBT6	STM32F103ZGT6	STM32F407VET6	STM8S003F3P6
STM32F030RCT6	STM32F103RCT6	STM32F105RBT6	STM32F407VGT6	STM8S003F3P6TR
STM32F051C8T6	STM32F103RET6	STM32F105RCT6	STM32F407ZET6	STM8S105K4T6C

Active component



S9S12G128AMLF	LPC54605J512BD100E	SAF7751HV/N205	TJA1042T/CM
FS32K142HAT0MLHT	MCIMX6U1AVM10AD	SPC5517EBMLQ66R	TJA1043T/1J
FS32K144HAT0VLLR	MCIMX6U6AVM08AC	SPC5643LAMLQ1	TJA1043TK/1Y
FS32K144HFT0MLLR	MIMXRT1052CVL5B	SPC5644AF0MMG1	TJA1044GTK/3
FS32K144HFT0VLLR	MKL15Z128VFM4R	SPC5644CF0VLU1	TJA1050T/CM
FS32K144HFT0VLLT	MKV10Z64VLF7	SPC5646CCF0MLT1	TJA1051T/CM
FS32K144UAT0VLLT	NCF3320EHN/0	SPC5674FK0MVR3R	TJA1052IT/2Y
FS32K148UJT0VLLT	PESD5V0S1BL,315	SPC5744PFK1AMLQ9	TJA1145AT/FD
JN5168/001,515	S912ZVC12F0MLF	SPC5777CCK3MME3	UJA1075ATW/5V0/WD
LPC11U35FBD48/40EL	S912ZVML12F3MKH	TEA19161T	UJA1167TK
LPC1763FBD100	S9S12G192F0VLL	TEF6686HN/V102	MC9S08QG8CFFE
LPC4088FBD208,551	S9S12ZVLS3F0MFMR	TJA1040T/CM	MRF1517NT1



BSC010N04LS	BSC057N08NS3	IPB107N20N3	IRF3205PBF
BSC010NE2LS	BSC070N10NS3	IPD70R360P7S	IRF4905PBF
BSC014N04LS	BSC0805LS	IPD70R360P7S	IRF640NPBF
BSC014N06NS	BSC093N04LS	IPL60R185C7	IRFH7440TRPBF
BSC016N06NS	BSC093N15NS5	IPP051N15N5	IRFR5305TRPBF
BSC026N08NS5	BSC190N15NS3	IPP075N15N3	IRFR7440TRPBF
BSC027N04LS	BSC320N20NS3	IPP60R190C6	IRLR7843TRPBF
BSC028N06LS3	BSZ100N06LS3G	IPT015N10N5	IRLR8726PBF
BSC028N06NS	IPB019N08N3	IPW60R070C6	SPB17N80C3
BSC035N10NS5	IPB042N10N3	IPW60R099C6	SPP20N60C3
BSC040N10NS5	IPB072N15N3	IPW65R041CFD	SPW47N60C3

Active component



TMS320LF2407APGEA	TPS51200DRCT	BQ25619RTWR	DS90UB948TNKDRQ1
TMS320F2812PGFA	TPS61087DRCR	BQ27441DRZR-G1B	DS90UB928QSQX/NOPB
TMS320F2809PZA	TPS61088RHLLR	BQ25895RTWR	DS90UB927QSQX/NOPB
TMS320F28016PZA	TPS562201DDCR	BQ25606RGER	DRV8833PWPR
TMS320F28015PZA	TPS62420DRCR	BQ24070RHLLR	BQ27426YZFR
TMS320F28027PTT	TPS54360BDDAR	BQ2022ADBZR	BQ24780SRUYR
TMS320F28034PNT	TPS715345DCKR	BQ27542DRZR-G1	TPS53353DQPR
TMS320F2806PZA	TPS61161DRVLR	BQ25601RTWR	TPS54527DDAR
TMS320LF2406APZA	TPS563201DDCR	BQ24715RGRR	TMS320F2811PBKA
TMS320F28335PGFA	TPS54331DR	BQ24725ARGRR	TMS320F2810PBKA
TMS320F2808PZA	TPS54160DGQR	BQ2057WSNTR	LM76002RNPR



AT89C51-24P	ATF16V8B-15PC	AT24C16	ATMEGA16A-AU
AT89S51-24PU	AT93C46D	AT24C256	ATMEGA16A-PU
AT89C52-24P	AT24C01	AT24C512	ATMEGA128A-AU
AT89S52-24PU	AT24C02	AT24C64	ATMEGA32A-AU
AT89C2051-24PU	AT24C04	ATMEGA8A-AU	ATMEGA32A-PU
AT89C55WD-24PU	AT24C08	ATMEGA8A-PU	ATMEGA64A-AU



IRF7456TRPBF	IRFH5007TRPBF	IRFH5020TRPBF	AUIRFS4310Z
IRFI634G	IRFI630GPBF	IRL5602STRR	IRJP6055DPP-90
IRG4BC15UD-STRL	IRG4BC30FD-STRR	IRG4BC30S-STRR	IRF9510STRL
IRG7PH3SUD1-EP	IRG7PH42UD-EP	IRG7PH42U-EP	

Active component



AD7705VRZ	ADXL213AE	AD8221ARZ	ADUM1400BRWZ
AD7713ANZ	ADXL321JCP	AD822ARZ	ADUM140IBRWZ
AD7715AN-3	ADXL322JCP	AD823ANZ	ADUM1411ARW/Z
AD7863ARZ	ADXL335BCPZ	AD8552ARZ	ADUM2400ARWZ
AD876JRZ	ADM690AARZ	AD8694ARUZ	ADUM240IARWZ
AD9280ARSZ	ADM691ARZ	OP07CSZ	ADUM3300ARWZ
AD976CNZ	ADM691SQ	OP177GPZ	ADUM340IARWZ
AD977ARZ	ADM811RARTZ	OP177GSZ	ADUC7020BCP2621
ADE7755ARS	ADM812MARTZ	OP2177ARZ	ADUC7021BCP262
AD7147ACP2-1500	ADP3050AR-33	OP275GP7	ADUC70268T262
AD420AN-32	ADP1823ACPZ	OP275GSZ	ADUC7027BST262
AD421BN	AD603ARZ	ADUM130ICRWZ	ADUC812BSZ
AD620ARZ	AD8009AR7	ADUC814BRU	AD5541CRZ
AD8015ARZ	ADUC843BS262-3	AD5542CRZ	AD622ANZ
ADM202EARN	ADUC845BS62-5	AD660AN	AD623ARZ
ADM213EARSZ	AD723ARUZD724R	AD627ARZ	AD5300BRN
ADM2483BRWZ	AD724JRZ	AD725AR	AD629ARZ
ADM2486BRWZ	AD725ARZ	AD7391ARUZ	AD797ARZ
ADM3222ARUZ	AD8021ARZ	AD7528JN	AD8001ARTZ
ADM3232EARUZ	AD8054ARUZ	AD9708ARUZ	AD8002ARZ
ADM3311EARSZ	AD8056ARZ	AD9860BST	AD8021ARZ
ADM3485EARZ	AD8075ARUZ	ADV7171KSUZ	AD8041ARZ
ADM706TARZ	AD8091ARZ	ADV7179KCP	AD8051ARZ
ADUM130ICRWZ	ADV7180BCPZ	AD621BRZ	ADV7180BCPZ
ADUM1100ARZ	AD9822JRSZ	ADV7391BCPZ	AD8052ARZ
ADUM1200ARZ	AD9880KSTZ-100	AD590JH	AD8056ARMZ
ADUM120IARZ	AD9888KS-170	AD594CD	AD8061ARTZ
ADUM1210BRZ	AD9985AKSTZ-110	AD698APZ	AD8065ARZ
ADUM1250ARZ	ADV7171KSUZ	ADXL103CE	AD8075ARUZ
ADUM1300ARWZ	ADV7179KCP	ADXL203CEMP37FS	AD8091ARTZ

Active component



MAX110BCPE	MAX230CPP	MAX3490CSA	MAX6316LUK46
MAX1193ETI	MAX238CNG	MAX3490ESA	MAX6350CSA
MAX1232CPA	MAX2620EUA	MAX3491CSA	MAX660CPA
MAX1232CSA	MAX2682EUT	MAX3491ECSA	MAX660CSA
MAX1236EUA	MAX3050ASA	MAX4020ESD	MAX664EPA
MAX125CEAX	MAX306CPI	MAX4212EUK	MAX66751SA
MAX1478CPP	MAX3080CPD	MAX4632CSE	MAX706CPA
MAX14808CPI	MAX3081EEPA	MAX485CPA	MAX708CSA
MAX14808EPI	MAX3082CPA	MAX490ESA	MAX713CPE
MAX1482CPD	MAX3088CSA	MAX4700CPE	MAX7219CNG
MAX1482CSD	MAX3088ESA	MAX487CSA	MAX726ECK
MAX1483CPA	MAX3100CPD	MAX5250ACPP	MAX749CPA
MAX1490BCPG	MAX3232CPE	MAX6010AEUR	MAX787CCK
MAX1677EEE	MAX3238EAI	MAX6035BAUR	MAX795CPA
MAX1771CSA	MAX3245EEAI	MAX6126AAS50	MAX807LCPE
MAX197BCNI	MAX3443EASA	MAX6143AAS50	MAX809TEUR
MAX1488EPPD	MAX3232ESE	MAX538BCPA	MAX765CPA
MDS2656URH	MDS1521URH	MDHTAN25URH	MDD7N20CRH
MDP1921TH	MDF1922TH	MDIS1903TH	MDD9N40RH
MDD5N50RH	MDD4N60RH	MDP5N50BTH	MDP4N60TH
MMP60R750PTH	MDP6N60TH	MDP7N60TH	MDF7NS0TH
MMF60R580PTH	MDFS10N60DTH	MMF60R290PTH	MMFT60R290P
MDIS5N40TH	MDIINGOSTH	MMIS60R580PTH	MDIB6N70CTH
MML60R290PTH	MDS3754ARH	MBQ40T6SFDSCSTH-B	MDP7N50TH
MDV1526URH	MDVI59SSURH	MDU1SISURH	MDU1518URH
MDU1511RH	MDS16S1URH	MDSI528URH	MDS1527URH
MMIS70R900PTH	MMP60R5B0PTH	MDFS11N60TH	MDS16S4RH
MDS16S4RH	MDS2659URH	MDS16S2EURH	MDF12N50FTH
MDFS5N50TH	MDP8N60TH	MDS1526URH	MMF60R360NTH
MAX202CPE	MAX3443EAPA	MAX6192CESA	MAX883CPA
MAX038CPP	MAX232CPE	MAX3488CSA	MAX6225BCPA
MAX1241BCPA	MAX4080IASA	MAX66/CPA	MAX3071EEPA
MAX761CPA	MAX531BCPD	MAX3232CSE	MAX1487CPA

Active component

NAND FLASH

SAMSUNG

K9F4008	K9F6408	K9F2808	K9F5608	K9K8G08
K9F1208	K9F1G08	K9F2G08	K9F4G08	K9F1G08U0B
K9F8G08	K9K1G08	K9K2G08	K9K4G08	K9F2G08U0C
K9F1G08R0B	K9F2G08U0B	K9F1G08U0C	K9F2G08U0A	K9K8G08U1B
K9F4G08U0B	K9G4G08U0B	K9F4G08U0C	K9G4G08U0D	K9GAG08U0M
K9G8G08U0A	K9WAG08U1B	K9GAG08U0D	K9GAG08U0E	K9F4G08U0M
K9LAG08U1A	K9LCG08U1M	K9LBG08U1D	K9LBG08U0E	K9ABG08U0M
K9LBG08U0D	K9LBG08U0M	K9GBG08U0M	K9HBG08U1A	K9HCG08U1D
K9BCG08U1M	K9KBG08U1M	K9KBG08S1M	K9GBG08U0A	K9LCG08U0A
K9HCG08U1M	K9HCG08U1E	K9WCG08U5M	K9WCG08S5M	K9MDG08U51
K9LCG08U1M	K9LCG08S1M	K9NCG08U5M	K9MDG08U5D	K9QDG08S5M
K9HDG08U5M	K9HDG08U5M	K9HDG08S5M	K9QDG08U5M	K9QDGD8U5M
K9PFG08U5M	K9PFG08U5M	K9PFG08S5M	K9CDG08U5M	K9PHGY8S7C



HY27US08561A	HY27US08281A	HY27US08121B	H27U518S2CTR
HY27UT084G2A	H27UAG8T2M	H27UAG8T2A	H27UBG8U5A
H27UBG8T2A	H27UCG8VFA	H27UCG8UDM	H27UCG8U5D
H27UCG8T2M	H27UDG8VEM	H27UDG8V5E	H27UDG8V5A
H27UAG8T2B	H27UBG8T2B	H27UCG8U28	H27UDG8V2B
HY27UF084G2B	H27QCG8T2A	H27UBG8T2M	H27UCG8U5A



MT29F2G08	MT29F16G08	MT29F32G08	MT29F64G08
MT29F128G08	MT29F256G08	MT29F2G16	MT29F4G16
MT29F8G16	MT29F32G08	MT29F64G08	MT29F128G08
MT29F256G08	MT29F512G08	MT29F384G08	MTF29F768G08



JS29F2G08	JS29F4G08	JS29F8G08	JS29F16G08	JS29F32G08
JS29F64G08	JS29F256G08	JS29F16B08	JS29F32B08	JS29F64B08

Active component SDRAM

SAMSUNG

K4S161622	K4S641632	K4S281632	K4S56632	K4S563232
K4S1632	K4S51163	K4S643232	K4S283222	K4S513233



HY57V641620	HY57V281620	HY57V561620	H57V561620FTP-H
H57V2562GTR-75C	H57V2562H57V1262	H57V2582GTR	H5MS5162
H5MS1G22	H5MS126	H5MS1G32	H5MS1G62
H5MS2G32	H5MS2G62	H5MS5122	H5MS5132
H5MS2562	H5MS2G22		



MT48LC2M8A1TG	MT48LC4M16A2P	MT48LC8M16A2P	MT48LC16M16A2P
MT48LC4M32B2P	MT48LC2M32	MT48LC4M32B2P	MT48LC8M32B2P
MT48LC32M16A2P-75ITC	MT48LC32M16A2P-6B	MT48LC32M16A2P-6G	MT48LC32M16A2P-75
MT48LC32M16A2P-75	MT48LC16M16A2P-75ITD		

Active component 74 series

74HC125	74HC14	74HC161	74HC174	74HC238	74HC259	74HC367	74HC390	74HC541	74HC4051
74HC126	74HC147	74HC164	74HC175	74HC240	74HC273	74HC368	74H123	74HC11	74HC4052
74HC132	74HC151	74HC165	74HC192	74HC241	74HC279	74HC373	74HC365	74HC157	74HC4053
74HC138	74HC153	74HC166	74HC193	74HC244	74HC280	74HC374	74HC158	74HC20	74HC4066
74HC139	74HC154	74HC173	74HC194	74HC245	74HC30	74HC377	74HC2	74HC32	74HC4520

Low-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
SI8800EDB-T2-E1	MICRO FOOT0	N	20	2.8	0.08	1	VISHAY/威世
AON2406	DFN-6 2*2	N	20	8	0.0125	1	AO/万代
FDMA7670	DFN-6 2*2	N	30	11	0.015	3	FAIRCHILD/仙童
FDFM2N111	DFN-6 3*3	N	20	4	0.1	1.5	FAIRCHILD/仙童
TPCC8007	DFN-8 3.3*3.3	N	20	27	0.0046	1.2	TOSHIBA/东芝
AON7760	DFN-8 3.3*3.3	N	25	75	0.002	2.2	AO/万代
FDM6296	DFN-8 3.3*3.3	N	30	11.5	0.0105	3	FAIRCHILD/仙童
STL17N3LLH6	DFN-8 3.3 3.3	N	30	17	0.0036	2.9	ST/意法半导体
AON7702L	DFN-8 3.3*3.3	N	30	20	0.01	3	AO/万代
AON7548	DFN-8 3.3*3.3	N	30	24	0.0088	2.5	AO/万代
BSZ130N03LSG	DFN-8 3.3*3.3	N	30	35	0.013	2.2	infineon/英飞凌
MDV1526URH	DFN-8 3.3*3.3	N	30	35.6	0.011	2.7	MagnaChip/美格纳
MDV1595SURH	DFN-8 3.3*3.3	N	30	36.1	0.0107	2	MagnaChip/美格纳
AON7202	DFN-8 3.3*3.3	N	30	40	0.005	2.3	AO/万代
AON7212L	DFN-8 3.3*3.3	N	30	40	0.006	2.3	AO/万代
AON7400B	DFN-8 3.3*3.3	N	30	40	0.0075	2.5	AO/万代
BSZ100N03MSG	DFN-8 3.3*3.3	N	30	40	0.0091	2	infineon/英飞凌
STL120N2VH5	DFN-8 5*6	N	20	120	0.003	2.8	ST/意法半导体
FDMS7580	DFN-8 5*6	N	25	49	0.0075	3	FAIRCHILD/仙童
AOL1440	DFN-8 5*6	N	25	85	0.0052	4	AO/万代
BSC024N025SG	DFN-8 5*6	N	25	100	0.0024	2	infineon/英飞凌
BSC029N025SG	DFN-8 5*6	N	25	100	0.0029	2	infineon/英飞凌
Si7636DP-T1-E3	DFN-8 5*6	N	30	17	0.004	3	VISHAY/威世
SiR472DP	DFN-8 5*6	N	30	20	0.012	2.5	VISHAY/威世
TPCA8064-H	DFN-8 5*6	N	30	20	0.0082	2.3	TOSHIBA/东芝
TPCA8023-H	DFN-8 5*6	N	30	21	0.0129	2.5	TOSHIBA/东芝
AON6416	DFN-8 5*6	N	30	22	0.008	2.4	AO/万代
AON6206	DFN-8 5*6	N	30	24	0.0065	2.3	AO/万代
AON6200L	DFN-8 5*6	N	30	24	0.0078	2.4	AO/万代
TPCA8030-H	DFN-8 5*6	N	30	24	0.011	2.5	TOSHIBA/东芝
TPCA8005-H	DFN-8 5*6	N	30	27	0.009	2.3	TOSHIBA/东芝
TPCA8018-H	DFN-8 5*6	N	30	30	0.0062	2.5	TOSHIBA/东芝
RJK03B7DPA-00-J53	DFN-8 5*6	N	30	30	0.0078	2.5	RENESAS/瑞萨
TPCA8059-H	DFN-8 5*6	N	30	32	0.0038	2.3	TOSHIBA/东芝
AON6748	DFN-8 5*6	N	30	32	0.0036	2.4	AO/万代
AON6566P	DFN-8 5*6	N	30	32	0.005	2.4	AO/万代
AON6506	DFN-8 5*6	N	30	36	0.0026	2.2	AO/万代
Si7170DP-T1-GE3	DFN-8 5*6	N	30	40	0.0034	2.6	VISHAY/威世
BSC079N03SG	DFN-8 5*6	N	30	40	0.0079	2	infineon/英飞凌
BSC100N03LSG,MSG	DFN-8 5*6	N	30	44	0.01	2.2,2	infineon/英飞凌

Low-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V) max	Brand
FDMS7694	DFN-8 5*6	N	30	44	0.0095	3	FAIRCHILD/仙童
FDMS7692A	DFN-8 5*6	N	30	45	0.008	3	FAIRCHILD/仙童
BSC090N03LSG,MSG	DFN-8 5*6	N	30	48	0.009	2.2,2	infineon/英飞凌
AOL1428A	DFN-8 5*6	N	30	49	0.008	2.6	AO/万代
BSC080N03LSG,MSG	DFN-8 5*6	N	30	53	0.008	2.2,2	infineon/英飞凌
AON6546	DFN-8 5*6	N	30	55	0.007	2.5	AO/万代
MDU1515URH	DFN-8 5*6	N	30	57.4	0.0072	2.7	MagnaChip/美格纳
STL60N3LLH5	DFN-8 5*6	N	30	60	0.0071	2.9	ST/意法半导体
AON6426	DFN-8 5*6	N	30	65	0.0055	2.5	AO/万代
AON6532	DFN-8 5*6	N	30	68	0.005	2.4	AO/万代
AON6790	DFN-8 5*6	N	30	68	0.0043	2.1	AO/万代
PH7030DL	DFN-8 5*6	N	30	68	0.0079	2	NXP/恩智浦
AON6718L	DFN-8 5*6	N	30	80	0.0037	2.2	AO/万代
AON6788	DFN-8 5*6	N	30	80	0.004	2	AO/万代
FDMS8026S	DFN-8 5*6	N	30	80	0.0043	3	FAIRCHILD/仙童
BSC050N03LSG	DFN-8 5*6	N	30	80	0.005	2.2	infineon/英飞凌
STL80N3LLH6	DFN-8 5*6	N	30	80	0.005	3	ST/意法半导体
PH4830L	DFN-8 5*6	N	30	84	0.0048	2.15	NXP/恩智浦
AON6702L	DFN-8 5*6	N	30	85	0.002	2.4	AO/万代
AON6404L	DFN-8 5*6	N	30	85	0.0022	2	AO/万代
AON6716L	DFN-8 5*6	N	30	85	0.0028	2.2	AO/万代
AOL1412	DFN-8 5*6	N	30	85	0.0039	2.4	AO/万代
MDU1518URH	DFN-8 5*6	N	30	94.5	0.0042	2.7	MagnaChip/美格纳
MDU1511RH	DFN-8 5*6	N	30	100	0.0024	2.7	MagnaChip/美格纳
STL100NH3LL	DFN-8 5*6	N	30	100	0.0035	2.9	ST/意法半导体
FDMS0302S	DFN-8 5*6	N	30	177	0.0019	3	FAIRCHILD/仙童
BSC883N03MSG	DFN-8 5*6	N	34	98	0.0038	2	infineon/英飞凌
AON6236	DFN-8 5*6	N	40	30	0.007	2.4	AO/万代
FDMS8333	DFN-8 5*6	N	40	167	0.0022	3	FAIRCHILD/仙童
IRF7456TRPBF	SOP-8	N	20	16	0.0065	2	IR
AP4800BGM-HF	SOP-8	N	30	9.6	0.018	2	AP/富鼎
S14894BDY-TI-E3	SOP-8	N	30	8.9	0.011	3	VISHAY/威世
DMN3030LSS	SOP-8	N	30	9	0.018	2.1	DIODES/美台
MDS1651URH	SOP-8	N	30	11.6	0.017	3	MagnaChip/美格纳
MDS1528URH	SOP-8	N	30	11.9	0.0188	2.7	MagnaChip/美格纳
STS12NH3LL	SOP-8	N	30	12	0.0105	3	ST/意法半导体
AO4710L	SOP-8	N	30	12.7	0.0118	2.3	AO/万代
TPC8041	SOP-8	N	30	13	0.007	2.5	TOSHIBA/东芝
AO4492L	SOP-8	N	30	13	0.0095	2.2	AO/万代
AO4720	SOP-8	N	30	13	0.011	2	AO/万代

Active component

MOSFET

Low-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
MDS1527URH	SOP-8	N	30	13.1	0.0159	2.7	MagnaChip/美格纳
AO4420	SOP-8	N	30	13.7	0.0105	2	AO/万代
Si4430BDY-T1-E3	SOP-8	N	30	14	0.0045	3	VISH AY/威世
FDS8817NZ	SOP-8	N	30	15	0.007	3	FAIRCHILD/仙童
MDS1654RH	SOP-8	N	30	15	0.0095	3	MagnaChip/美格纳
MDS2659URH	SOP-8	N	30	15	0.0116	2.7	MagnaChip/美格纳
MDS1652EURH	SOP-8	N	30	16	0.005	3	MagnaChip/美格纳
MDS1526URH	SOP-8	N	30	16.1	0.011	2.7	MagnaChip/美格纳
BSO052N03S	SOP-8	N	30	17	0.0052	2	infineon英飞凌
Si4856ADY-T1-E3	SOP-8	N	30	17	0.0052	2.5	VISH AY/威世
TPC8A03-H	SOP-8	N	30	17	0.0056	2.3	TOSHIBA/东芝
TPC8062-H	SOP-8	N	30	18	0.0058	2.3	TOSHIBA东芝
FDS7066SN3	SOP-8	N	30	19	0.0055	3	FAIRCHILD/仙童
MDS2656URH	SOP-8	N	30	20.3	0.0077	2.7	MagnaChip/美格纳
MDS1521URH	SOP-8	N	30	28.2	0.004	2.7	MagnaChip/美格纳
Si4438DY-T1-E3	SOP-8	N	30	36	0.0027	2.6	VISH AY/威世
TPCF8001	VS-8	N	30	7	0.023	2.5	TOSHIBA/东芝
TPCF8002	VS-8	N	30	7	0.021	2.5	TOSHIBA/东芝
SSM3K35CT	SOT-883	N	20	0.18	3	1	TOSHIBA/东芝
SSM3K56CT	SOT-883	N	20	0.8	0.235	1	TOSHIBA/东芝
SSM4K27CT	CST4	N	20	0.5	0.205	1.1	TOSHIBA/东芝
SSM3K309T	SOT-23	N	20	4.7	0.031	1	TOSHIBA/东芝
SSM3K15F	SOT-23	N	30	0.1	4	1.5	TOSHIBA/东芝
AO6702L	SOT-23-6	N	20	3.8	0.05	1	AO/万代
TPC6008-H	SOT-23-6	N	30	5.9	0.06	2.3	TOSHIBA/东芝
ECH8411	SOT-23-8	N	20	9	0.016	1.3	SANYO/三洋
AO7414L	SOT-323	N	20	2	0.062	1	AO/万代
SSM3K104TU	SOT-323	N	20	3	0.056	1	TOSHIBA/东芝
SSM3K123TU	SOT-323	N	20	4.2	0.028	1	TOSHIBA/东芝
SSM3K116TU	SOT-323	N	30	2.2	0.1	1.1	TOSHIBA/东芝
SSM6K411TU	SOT-363	N	20	10	0.012	1.2	TOSHIBA/东芝
SSM3K16FS	SOT-416/SOT-523	N	20	0.1	3	1.1	TOSHIBA/东芝
SSM3K36FS	SOT-416/SOT-523	N	20	0.5	0.66	1	TOSHIBA/东芝
SSM3K43FS	SOT-416/SOT-523	N	20	0.5	0.66	1	TOSHIBA/东芝
SSM3K15AFS	SOT-416/SOT-523	N	30	0.1	3.6	1.5	TOSHIBA/东芝
SSM3K44FS	SOT-416/SOT-523	N	30	0.1	4	1.5	TOSHIBA/东芝
SSM6K204FE	SOT-563-6/EMT6	N	20	2	0.126	1	TOSHIBA/东芝
SSM3K38MFV	SOT-723	N	20	0.18	3	1	TOSHIBA/东芝
SSM3K37MFV	SOT-723	N	20	0.25	2.2	1	TOSHIBA/东芝
SSM3K36MFV	SOT-723	N	20	0.5	0.66	1	TOSHIBA/东芝

Active component

MOSFET

Low-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
SSM3K15AMFV	SOT-723	N	30	0.1	3.6	1.5	TOSHIBA/东芝
SSM3K15FV	SOT-723	N	30	0.1	4	1.5	TOSHIBA/东芝
FK3303010L	SOT-723	N	30	0.1	3	1.5	Panasonic/松下
SSM3K15AFU	SOT-323	N	30	0.1	3.6	1.5	TOSHIBA/东芝
SUD50N02-09P-T4	SOT-252	N	20	20	0.0095	3	VISHAY/威世
IRFR3711ZTRL	SOT-252	N	20	93	0.0057	2.45	IR
SUD50N024-09P-T4	SOT-252	N	24	49	0.0095	3	VISHAY/威世
STD50NH02LT4	SOT-252	N	24	50	0.0105	1.8(typ.)	ST/意法半导体
STD70N02LT4	SOT-252	N	24	60	0.008	2.9	ST/意法半导体
SUD50N024-06P-T4	SOT-252	N	24	80	0.006	3	VISHAY/威世
P2003BDG	SOT-252	N	25	32	0.02	2.5	NIKO/尼克森微
N0201NY-ZK-E1	SOT-252	N	25	48	0.0078	3	RENESAS/瑞萨
IPDH6N03LAG	SOT-252	N	25	50	0.006	2	infineon/英飞凌
AOD452	SOT-252	N	25	55	0.0085	3	AO/万代
IRLR8259TRLPBF	SOT-252	N	25	57	0.0087	2.35	IR
FDD8780	SOT-252	N	25	60	0.0085	2.5	FAIRCHILD/仙童
SUD50N025-09BP-4E3	SOT-252	N	25	62	0.0086	2.4	VISHAY/威世
FDD6796A	SOT-252	N	25	67	0.0057	3	FAIRCHILD/仙童
IPD090N03LG	SOT-252	N	30	40	0.009	2.2	infineon/英飞凌
TK40P03M1	SOT-252	N	30	40	0.0108	2.3	TOSHIBA/东芝
TK45P03M1	SOT-252	N	30	45	0.0097	2.3	TOSHIBA/东芝
AOD522P	SOT-252	N	30	46	0.0052	2.4	AO/万代
AOD514	SOT-252	N	30	46	0.0059	2.4	AO/万代
AOD4144	SOT-252	N	30	46	0.0065	2.4	AO/万代
AOD4158P	SOT-252	N	30	46	0.009	2.4	AO/万代
IPD060N03LG	SOT-252	N	30	50	0.006	2.2	infineon/英飞凌
FDD6696	SOT-252	N	30	50	0.008	3	FAIRCHILD/仙童
IRLR8729TRPBF	SOT-252	N	30	58	0.0089	2.35	IR
NTD4302T4G	SOT-252	N	30	68	0.01	3	ON/安森美
TD422BL	SOT-252	N	30	69	0.006	2.8	NIKO/尼克森微
PD548BA	SOT-252	N	30	85	0.0046	2.35	NIKO/尼克森微
AOD4132	SOT-252	N	30	85	0.004	3	AO/万代
QM4002AD	SOT-252	N	40	23	0.028	3	UBIQ/力祥半导体
AP9967GH-HF	SOT-252	N	40	33	0.0135	3	AP/富鼎
NTD5407NT4G	SOT-252	N	40	38	0.026	3.5	ON/安森美
TK40P04M1	SOT-252	N	40	40	0.011	2.3	TOSHIBA/东芝
2SK3572-ZK-E1	SOT-263	N	20	80	0.0057	2.5	NEC
STB100NH02LT4	SOT-263	N	24	60	0.006	3	ST/意法半导体
PSMN004-25B	SOT-263	N	25	75	0.004	2	PHILIPS/飞利浦
SDB65N03L	SOT-263	N	30	65	0.009	3	SamHop/三合微

Low-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
AOB4184	SOT-263	N	40	50	0.01	3	AO/万代
CEP75A3	TO-220	N	25	69	0.009	3	CET/华瑞
PHP152NQ03LTA	TO-220	N	25	75	0.004	2	PHILIPS/飞利浦
P2003BT	TO-220	N	30	33	0.02	2.5	NIKO/尼克森微
FDP7030BL	TO-220	N	30	60	0.009	3	FAIRCHILD/仙童
AP85T03GP	TO-220	N	30	75	0.006	3	AP/富鼎
QM3006P	TO-220	N	30	90	0.006	2.5	UBIQ/力祥半导体
AOT502	TO-220	N	33	60	0.0115	2.7	AO/万代
AOT500	TO-220	N	33	80	0.0053	3	AO/万代
IPP065N04N G	TO-220	N	40	50	0.0065	4	infineon英飞凌
PSMN4R5-40PS	TO-220	N	40	96	0.0046	4	NXP/恩智浦
AOT440L	TO-220	N	40	105	0.0047	2.3	AO/万代
HUF75339P3	TO-220	N	55	75	0.012	4	FAIRCHILD/仙童
FDU6780A	TO-251A	N	25	30	0.0088	3	FAIRCHILD/仙童
AOI472A	TO-251A	N	25	50	0.0052	2.5	AO/万代
AOI4102	TO-251A	N	30	19	0.037	3	AO/万代
AOI516	TO-251A	N	30	46	0.005	2.6	AO/万代
AOI4144	TO-251A	N	30	46	0.0065	2.4	AO/万代
AOI452A	TO-251A	N	30	46	0.0065	2.4	AO/万代
AOI206	TO-251A	N	30	54	0.0055	2.3	AO/万代
AOI518	TO-251A	N	30	54	0.008	2.2	AO/万代
AOI510	TO-251A	N	30	70	0.0026	2.2	AO/万代
PO603BISB	TO-251A	N	30	70	0.0058	3	NIKO/尼克森微

Medium-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
SM6125NSKPC-TRG	DFN-8 5*6	N	60	100	0.004	3	Sinopower/大中积体
IRFH5007TRPBF	DFN-8 5*6	N	75	100	0.0059	4	IR
FDMS86104	DFN-8 5*6	N	100	39	0.024	4	FAIRCHILD/仙童
IRFH5020TRPBF	DFN-8 5*6	N	200	43	0.055	5	IR
MTD011N10RQ8	SOP-8	N	100	11.5	0.0125	2.6	Cystek/全宇昕
PA210BL	SOT-223	N	100	3	0.12	3	NIKO/尼克森微
FDT3612	SOT-223	N	100	3.7	0.12	4	FAIRCHILD/仙童
MDHT4N25URH	SOT-223	N	250	0.83	1.75	5	MagnaChip/美格纳
T2N7002	SOT-23	N	60	0.2	2.1	2.5	TOSHIBA/东芝

Medium-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V) max	Brand
SSM3K7002BF	SOT-23	N	60	0.2	2.1	3.1	TOSHIBA/东芝
2N7002A-7	SOT-23	N	60	0.22	6	2	DIODES/美台
2N7002K-7	SOT-23	N	60	0.38	2	2.5	DIODES/美台
2N7002P	SOT-23	N	60	0.36	1.6	2.4	NXP/恩智浦
sSM6K407TU	SOT-363	N	60	2	0.3	2	TOSHIBA/东芝
AOD474	SOT-252	N	75	10	0.13	2.4	AO/万代
SFT1427-TL-E	SOT-252	N	80	7	0.066	2.6	SANYO/三洋
P8008BDA	SOT-252	N	80	16	0.068	2.3	NIKO/尼克森微
PD504BA	SOT-252	N	110	15	0.085	3	NIKO/尼克森微
IRFR220BTF	SOT-252	N	200	4.6	0.8	4	FAIRCHILD/仙童
MDD7N20CRH	SOT-252	N	200	5	0.69	4	MagnaChip/美格纳
IRFR230BTM	SOT-252	N	200	7.5	0.4	4	FAIRCHILD/仙童
FDD10N20LZTM	SOT-252	N	200	7.6	0.36	3	FAIRCHILD/仙童
FDD7N25LZTM	SOT-252	N	250	6.2	0.55	2.5	FAIRCHILD/仙童
STB30NE06LT4	SOT-263	N	60	30	0.05	2.5	ST/意法半导体
AOB414	SOT-263	N	100	51	0.025	4	AO/万代
AOB2918L	SOT-263	N	100	90	0.007	3.9	AO/万代
PFB110N10S	SOT-263	N	100	117	0.0072	4	POWER
AUIRFS4310z	SOT-263	N	100	127	0.006	4	IR
TK65G10N1	SOT-263	N	100	136	0.0045	4	TOSHIBA东芝
SSPL6022	TO-220	N	60	50	0.023	4	SILIKRON/硅能
IPP084N06L3 G	TO-220	N	60	50	0.0084	2.2	infineon英飞凌
FTP18N06N	TO-220	N	60	55	0.018	4	IPS
2SK3825-TW	TO-220	N	60	74	0.013	2.6	SANYO/三洋
TK100E06N1	TO-220	N	60	263	0.0023	4	TOSHIBA东芝
TK80E08K3	TO-220	N	75	80	0.009	4	TOSHIBA/东芝
BXL4001	TO-220	N	75	85	0.0124	4	SANYO/三洋
FDP032N08B	TO-220	N	80	211	0.0033	4.5	FAIRCHILD/仙童
STP30NF10	TO-220	N	100	35	0.045	4	ST/意法半导体
TK40E10K3	TO-220	N	100	40	0.015	4	TOSHIBA/东芝
PSMN016-100PS	TO-220	N	100	57	0.016	4	NXP/恩智浦
FDP120N10	TO-220	N	100	74	0.012	4.5	FAIRCHILD/仙童
FDP090N10	TO-220	N	100	75	0.009	4.5	FAIRCHILD/仙童
BUK9510-100B	TO-220	N	100	110	0.01	2	PHILIPS/飞利浦
PFP140N10P	TO-220	N	100	124	0.0085	4	POWER
PFP160N10S	TO-220	N	100	152	0.0065	4	POWER
MDP1921TH	TO-220	N	100	153	0.0045	4	MagnaChip/美格纳
TK42E12N1	TO-220	N	120	42	0.0094	4	TOSHIBA/东芝
AOT20N25L	TO-220	N	250	20	0.17	4.5	AO/万代
2SK3702JS	TO-220F	N	60	18	0.055	2.6	SANYO/三洋

Active component

MOSFET

Medium-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V) max	Brand
PSMN3R9-60xS	TO-220F	N	60	75	0.004	4	NXP/恩智浦
FDPF035N06B	TO-220F	N	60	88	0.0035	4	FAIRCHILD/仙童
TK40A08K3	TO-220F	N	75	40	0.009	4	TOSHIBA/东芝
AOTF474	TO-220F	N	75	47	0.0113	4	AO/万代
2SK4227JS	TO-220F	N	75	48	0.0137	4	SANYO/三洋
TK80A08K3	TO-220F	N	75	80	0.0045	4	TOSHIBA/东芝
2SK3706	TO-220F	N	100	12	0.13	2.6	SANYO/三洋
AP30T10GI-HF	TO-220F	N	100	16	0.055	2.5	AP/富鼎
AOTF298L	TO-220F	N	100	33	0.0145	4,1	AO/万代
MDF1922TH	TO-220F	N	100	40	0.0087	4	MagnaChip/美格纳
AOTF296L	TO-220F	N	100	41	0.01	3.4	AO/万代
STF130N10F3	TO-220F	N	100	46	0.0096	4	ST/意法半导体
TK34A10N1	TO-220F	N	100	34	0.0095	4	TOSHIBA/东芝
TK40A10N1	TO-220F	N	100	40	0.0082	4	TOSHIBA/东芝
TK56A12N1	TO-220F	N	120	56	0.0075	4	TOSHIBA/东芝
AOTF454L	TO-220F	N	150	13	0.094	4.6	AO/万代
P5015ATF	TO-220F	N	150	22	0.05	4	NIKO/尼克森微
AP20T15GI-HF	TO-220F	N	150	22.2	0.07	3	AP/富鼎
IRFI634G	TO-220F	N	200	5.6	0.45	4	IR
AOTF450L	TO-220F	N	200	5.8	0.7	4.5	AO/万代
IRFI630GPBF	TO-220F	N	200	5.9	0.4	4	IR
2SK2350	TO-220F	N	200	8.5	0.4	3.5	TOSHIBA/东芝
TK15A20D	TO-220F	N	200	15	0.18	3.5	TOSHIBA/东芝
SMK1820FC	TO-220F	N	200	18	0.17	4	AUK
P1820ATF	TO-220F	N	200	18	0.16	4	NIKO/尼克森微
TK8A25DA	TO-220F	N	250	7.5	0.5	3.5	TOSHIBA/东芝
FQPF9N25CRDTU	TO-220F	N	250	8.8	0.43	4	FAIRCHILD/仙童
2SK2508	TO-220F	N	250	13	0.25	3.5	TOSHIBA/东芝
AoW2918	TO-262	N	100	90	0.007	3.9	AO/万代
IRFP254N	TO-247	N	250	23	0.125	4	VISHAY/威世
FQU13N10LTU	TO-251	N	100	10	0.18	2	FAIRCHILD/仙童
MDIS1903TH	TO-251A	N	100	12.8	0.105	3	MagnaChip/美格纳
STU7NF25	TO-251	N	250	8	0.42	4	ST/意法半导体
BUK9510-100B	TO-220	N	100	110	0.01	2	PHILIPS/飞利浦
PFP140N10P	TO-220	N	100	124	0.0085	4	POWER
PFP160N10S	TO-220	N	100	152	0.0065	4	POWER
MDP1921TH	TO-220	N	100	153	0.0045	4	MagnaChip/美格纳
TK42E12N1	TO-220	N	120	42	0.0094	4	TOSHIBA/东芝
AOT20N25L	TO-220	N	250	20	0.17	4.5	AO/万代
2SK3702JS	TO-220F	N	60	18	0.055	2.6	SANYO/三洋

High-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V) max	Brand
TK12V60W	DFN-8 8*8	N	600	11.5	0.3	3.7	TOSHIBA/东芝
TK16V60W	DFN-8 8*8	N	600	15.8	0.19	3.7	TOSHIBA/东芝
TK31V60W	DFN-8 8*8	N	600	30.8	0.098	3.7	TOSHIBA/东芝
AOD3N40	SOT-252	N	400	2.6	3.1	4.5	AO/万代
STD5NK40ZT4	SOT-252	N	400	3	1.8	4.5	ST/意法半导体
MDD9N40RH	SOT-252	N	400	6	0.85	5	MagnaChip/美格纳
IRFR430BTM	SOT-252	N	500	3.5	1.5	4	FAIRCHILD/仙童
MDD5N50RH	SOT-252	N	500	4.4	1.4	5	MagnaChip/美格纳
STK830D	SOT-252	N	500	4.5	1.5	4	AUK
TK4P55DA	SOT-252	N	550	3.5	2.45	4.4	TOSHIBA/东芝
TK2P60D	SOT-252	N	600	2	4.3	4.4	TOSHIBA/东芝
2SK3113-Z-E1	SOT-252	N	600	2	4.4	3.5	RENESAS/瑞萨
MDD4N60RH	SOT-252	N	600	4	2	5	MagnaChip/美格纳
AOD4TL60	SOT-252	N	600	4	-	-	AO/万代
TK5P60W	SOT-252	N	600	5.4	0.9	3.7	TOSHIBA/东芝
TK6P60V	SOT-252	N	600	6.2	0.75	-	TOSHIBA/东芝
TK6P60W	SOT-252	N	600	6.2	0.82	3.7	TOSHIBA/东芝
TK7P60V	SOT-252	N	600	7	0.6	3.5	TOSHIBA/东芝
TK7P60W	SOT-252	N	600	7	0.6	3.7	TOSHIBA/东芝
SJMN11S60D	SOT-252	N	600	11	0.38	4.5	AUK
TK5P65W	SOT-252	N	650	5.2	1.22	3.5	TOSHIBA/东芝
TK6P65W	SOT-252	N	650	5.8	1.05	3.5	TOSHIBA/东芝
PFD65R540G	SOT-252	N	650	8	0.54	3.5	POWER
PFD65R360G	SOT-252	N	650	11	0.36	3.5	POWER
TK3P80E	SOT-252	N	800	3	4.9	4	TOSHIBA/东芝
2SK3688-01S	SOT-263	N	600	16	0.57	5	FUJI/富士
STB23NM60N	SOT-263	N	600	19	0.18	4	ST/意法半导体
TK14G65W5	SOT-263	N	650	13.7	0.3	4.5	TOSHIBA/东芝
STB21N65M5	SOT-263	N	650	17	0.19	5	ST/意法半导体
IRF830-HF	TO-220	N	500	4.5	1.5	4	AP/富鼎
P0550AT	TO-220	N	500	5	1.5	4.5	NIKO/尼克森微
MDP5N50BTH	TO-220	N	500	5	1.4	4	MagnaChip/美格纳
MDP7N50TH	TO-220	N	500	7	0.9	5	MagnaChip/美格纳
IPP50R520CP	TO-220	N	500	7.1	0.52	3.5	infineon英飞凌
MTN8N50E3	TO-220	N	500	8	0.85	4	Cystek/全宇昕
2SK3325B-S19	TO-220	N	500	10	0.85	3.5	NEC
MDP4N60TH	TO-220	N	600	4.6	2	5	MagnaChip/美格纳
MMP60R750PTH	TO-220	N	600	5.7	0.75	4	MagnaChip/美格纳
MDP6N60TH	TO-220	N	600	6	1.4	5	MagnaChip/美格纳
MDP7N60TH	TO-220	N	600	7	1.15	5	MagnaChip/美格纳

Active component

MOSFET

High-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V) max	Brand
IPP60R600C6	TO-220	N	600	7.3	0.6	3.5	infineon/英飞凌
MMP60R580PTH	TO-220	N	600	8	0.55	4	MagnaChip/美格纳
MDP8N60TH	TO-220	N	600	8	1	5	MagnaChip/美格纳
TK10E60W	TO-220	N	600	9.7	0.38	3.7	TOSHIBA/东芝
TK31E60W	TO-220	N	600	30.8	0.088	3.7	TOSHIBA/东芝
STPSNK70Z	TO-220	N	700	7.5	1.2	4.5	ST/意法半导体
SPP04N80C3	TO-220	N	800	4	1.3	3.9	infineon/英飞凌
2SK3303-01	TO-220	N	800	6	2.1	3.5	FUJI/富士
2SK4117LS	TO-220F	N	400	15	0.42	5	SANYO/三洋
2SK4120LS	TO-220F	N	450	10	0.68	5	SANYO/三洋
TK11A45D	TO-220F	N	450	11	0.62	4	TOSHIBA/东芝
STP5NK50ZFP	TO-220F	N	500	4.4	1.5	4.5	ST/意法半导体
FDPF5N50T	TO-220F	N	500	5	1.4	5	FAIRCHILD/仙童
AOTF5N50	TO-220F	N	500	5	1.5	4.5	AO/万代
TK5A50D	TO-220F	N	500	5	1.5	4.4	TOSHIBA/东芝
MDF5N50TH	TO-220F	N	500	5	1.4	5	MagnaChip/美格纳
MDF7N50TH	TO-220F	N	500	7	0.9	5	MagnaChip/美格纳
STP9NK50ZFP	TO-220F	N	500	7.2	0.85	4.5	ST/意法半导体
AOTF8N50	TO-220F	N	500	8	0.85	4.6	AO/万代
2SK3561	TO-220F	N	500	8	0.85	4	TOSHIBA/东芝
TK8A50D	TO-220F	N	500	8	0.85	4	TOSHIBA/东芝
2SK4097LS	TO-220F	N	500	9.5	0.65	5	SANYO/三洋
FDPF12N50UT	TO-220F	N	500	10	0.8	5	FAIRCHILD/仙童
2SK3326B-S17-AYIJK	TO-220F	N	500	10	0.85	3.5	RENESAS/瑞萨
AP11N501-HF	TO-220F	N	500	11	0.62	4	AP/富鼎
MDF12N50FTH	TO-220F	N	500	11.5	0.65	5	MagnaChip/美格纳
2SK3469-01MR	TO-220F	N	500	12	0.52	5	FUJI/富士
TK12A50DR	TO-220F	N	500	12	0.52	4	TOSHIBA/东芝
TK14A55D	TO-220F	N	550	14	0.37	4	TOSHIBA/东芝
AOTF2N60	TO-220F	N	600	2	4.4	4.5	AO/万代
PO260ATF	TO-220F	N	600	2	4.4	4.5	NIKO/尼克森微
2SK2624FG	TO-220F	N	600	3.5	2.6	5.5	SANYO/三洋
2SK4197FS	TO-220F	N	600	3.5	3.25	5	SANYO/三洋
PO660ATF	TO-220F	N	600	6	1.25	4.5	NIKO/尼克森微
2SK3562	TO-220F	N	600	6	1.25	4	TOSHIBA/东芝
TK7A60W	TO-220F	N	600	7	0.6	3.7	TOSHIBA/东芝
KF7N60F	TO-220F	N	600	7	1.2	4.5	KEC
AOTF7N60L	TO-220F	N	600	7	1.2	4.5	AO/万代
MMF60R580PTH	TO-220F	N	600	8	0.58	4	MagnaChip/美格纳
TK9A60D	TO-220F	N	600	9	0.83	4	TOSHIBA/东芝

High-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
PFF10NG0	TO-220F	N	600	9.5	0.9	4	POWER
2SK3569	TO-220F	N	600	10	0.75	4	TOSHIBA/东芝
AOTF10T60	TO-220F	N	600	10	0.7	5	AO/万代
MDFS10N60DTH	TO-220F	N	600	10	0.75	4	MagnaChip/美格纳
MMF60R360NTH	TO-220F	N	600	11	0.36	4	MagnaChip/美格纳
MDFS11N60TH	TO-220F	N	600	11	0.55	5	MagnaChip/美格纳
2SK4086LS	TO-220F	N	600	11.5	0.75	5	SANYO/三洋
AOTF12T60P	TO-220F	N	600	12	0.52	5	AO/万代
TK12A60D	TO-220F	N	600	12	0.55	4	TOSHIBA/东芝
2SK3797	TO-220F	N	600	13	0.43	4	TOSHIBA/东芝
MMF60R290PTH	TO-220F	N	600	13	0.29	4	MagnaChip/美格纳
MMFT60R290P	TO-220F	N	600	13	0.29	4	MagnaChip/美格纳
PFF13N60	TO-220F	N	600	13	0.51	4	POWER
FMV13N60E	TO-220F	N	600	13	0.58	3.5	FUJI/富士
2SK4087LS	TO-220F	N	600	14	0.61	5	SANYO/三洋
TK16A60W	TO-220F	N	600	15.8	0.19	3.7	TOSHIBA/东芝
TK16A60W5	TO-220F	N	600	15.8	0.23	4.5	TOSHIBA/东芝
TK31A60W	TO-220F	N	600	30.8	0.088	3.7	TOSHIBA/东芝
STF3N62K3	TO-220F	N	620	2.7	2.5	4.5	ST/意法半导体
PFF2N65	TO-220F	N	650	1.8	5.3	4	POWER
MTN2N65FP	TO-220F	N	650	1.8	6.4	4	Cystek/全宇昕
QM02N65F	TO-220F	N	650	2	8	5	UBIQ/力祥半导体
STFU9N65M2	TO-220F	N	650	5	0.9	4	ST/意法半导体
MTN6N65FP	TO-220F	N	650	6	1.5	4	Cystek/全宇昕
TK7A65W	TO-220F	N	650	6.8	0.78	3.5	TOSHIBA/东芝
AOTF8N65	TO-220F	N	650	8	1.15	5	AO/万代
TK17A65W	TO-220F	N	650	17.3	0.2	3.5	TOSHIBA/东芝
TK35A65W	TO-220F	N	650	35	0.08	3.5	TOSHIBA/东芝
SMK0270F	TO-220F	N	700	2	6.3	4	AUK
QM12N70F	TO-220F	N	700	12	1	5	UBIQ/力祥半导体
AOTF9N70L	TO-220F	N	700	9	1.2	4.5	AO/万代
PFF3N80	TO-220F	N	800	3	4.8	5	POWER
2SK3457	TO-220F	N	800	5	2.2	3.5	RENESAS/瑞萨
TK15J60U	TO-3P	N	600	15	0.3	5	TOSHIBA/东芝
STW23NM50N	TO-247	N	500	17	0.19	4	ST/意法半导体
STW24NM60N	TO-247	N	600	17	0.19	4	ST/意法半导体
STW47NM60ND	TO-247	N	600	35	0.088	5	ST/意法半导体
AOK53S60	TO-247	N	600	53	0.07	3.8	AO/万代
SiHG70N60EF-GE3	TO-247	N	600	70	0.038	4	VISHAY/威世
APT94N65B2C3G	TO-247	N	650	94	0.035	3.9	Microsemi

High-Voltage, N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V) max	Brand
STW9NK70Z	TO-247	N	700	7.5	1.2	4.5	ST/意法半导体
MDIS5N40TH	TO-251A	N	400	3.4	1.6	5	MagnaChip/美格纳
P0550AI	TO-251	N	500	5	1	5	NIKO/尼克森微
MDI1N60STH	TO-251	N	600	1	8.5	5	MagnaChip/美格纳
IRFU1N60APBF	TO-251	N	600	1.4	7	4	VISHAY/威世
2SK2623A-MG-E	TO-251	N	600	1.5	5.5	5.5	SANYO/三洋
AP03N70J-HF	TO-251	N	600	3.3	3.6	4	AP/富鼎
P0460BI	TO-251	N	600	4	2.5	4	NIKO/尼克森微
STU7NM60N	TO-251	N	600	4.7	0.9	4	ST/意法半导体
TK5Q60V	TO-251A	N	600	5.4	0.9	0	TOSHIBA/东芝
TK7Q60w	TO-251A	N	600	7	0.6	3.7	TOSHIBA/东芝
TK8Q60V	TO-251A	N	600	8	0.5	0	TOSHIBA/东芝
TK8Q60w	TO-251A	N	600	8	0.5	3.7	TOSHIBA/东芝
MMIS60R580PTH	TO-251A	N	600	8	0.58	4	MagnaChip/美格纳
TK10Q60w	TO-251A	N	600	9.7	0.43	3.7	TOSHIBA/东芝
PFU5N70G	TO-251	N	650	3.6	2.9	4	POWER
PFU4N65	TO-251	N	650	3.6	2.9	4	POWER
QM04N65U	TO-251	N	650	4	2.6	5	UBIQ/力祥半导体
TK5Q65W	TO-251A	N	650	5.2	1.22	3.5	TOSHIBA/东芝
PFU1N70Ys	TO-251	N	700	0.8	15	5	POWER
PFU1N70YG	TO-251	N	700	0.8	15	5	POWER
PFU2N70G	TO-251	N	700	1.6	6.8	4	POWER
PFU70R1K2G	TO-251	N	700	4	1.4	3.5	POWER
MDIB6N70CTH	TO-251	N	700	5	1.8	4	MagnaChip/美格纳
MMIS70R900PTH	TO-251A	N	700	5	0.9	4	MagnaChip/美格纳
PFU70R590G	TO-251	N	700	8	0.59	3.5	POWER
STI13NK60Z	TO-262	N	600	13	0.55	4.5	ST/意法半导体
MML60R290PTH	TO-262	N	600	13	0.29	4	MagnaChip/美格纳
IPI60R190C6	TO-262	N	600	20.2	0.19	3.5	infineon英飞凌
ITLO8N65A	TO-262	N	650	8	1	4	IPS
AOWF10T60	TO-262F	N	600	10	0.7	5	AO/万代
STFI13NM60N	TO-262F	N	600	11	0.36	4	ST/意法半导体
STFI24N60M2	TO-262F	N	600	18	0.19	4	ST/意法半导体
STFI6N62K3	TO-262F	N	620	5.5	1.2	4.5	ST/意法半导体
STFI15NM65N	TO-262F	N	650	12	0.38	4	ST/意法半导体
STW24NM60N	TO-247	N	600	17	0.19	4	ST/意法半导体
STW47NM60ND	TO-247	N	600	35	0.088	5	ST/意法半导体
AOK53S60	TO-247	N	600	53	0.07	3.8	AO/万代
SIHG70N60EF-GE3	TO-247	N	600	70	0.038	4	VISHAY/威世
APT94N65B2C3G	TO-247	N	650	94	0.035	3.9	Microsemi

Dual N-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
SSM6N55NU	DFN-622	Dual N	30	4	0.046	2.5	TOSHIBA/东芝
AOC4810	DFN-8	Dual N	30	8	0.0088	2.2	AO/万代
AON7932	DFN-8 3.3*3.3	Dual N	30	26	0.02	2.4	AO/万代
			30	35	0.012	2.1	
AON6934	DFN-8 5*6	Dual N	30	28	0.0052	2.2	AO/万代
			30	36	0.0028	2.2	
AON6974A	DFN-8 5*6	Dual N	30	28	0.0052	2.2	AO/万代
			30	32	0.0033	2.2	
AON6928	DFN-8 5*6	Dual N	30	30	0.0082	2.5	AO/万代
			30	36	0.0029	2.2	
AON6938	DFN-8 5*6	Dual N	30	30	0.0082	2.5	AO/万代
			30	42	0.0022	2.2	
AON6920	DFN-8 5*6	Dual N	30	60	0.0052	2.3	AO/万代
			30	85	0.0018	2.3	
FDMS3660S	DFN-8 5*6	Dual N	30	60	0.008	2.7	FAIRCHILD/仙童
			30	145	0.0018	2.2	
FDMS7608s	DFN-8 5*6	Dual N	30	46	0.01	3	FAIRCHILD/仙童
			30	60	0.0063	3	
STL65DN3LLH5	DFN-8 5*6	Dual N	30	65	0.0065	2.9	ST/意法半导体
BSC750N10NDG	DFN-8 5*6	Dual N	100	13	0.075	4	infineon英飞凌
Si4834DY-T1	SOP-8	Dual N	30	5.7	0.022	3	VISHAY/威世
AO4916	SOP-8	Dual N	30	8.5	0.017	3	AO/万代
AO4946	SOP-8	Dual N	30	8.6	0.016	2.4	AO/万代
ECH8649	SOT-23-8	Dual N	20	7.5	0.017	1.3	SANYO/三洋
ECH8653	SOT-23-8	Dual N	20	7.5	0.02	2.4	SANYO/三洋
SSM6N25TU	SOT-363	Dual N	20	0.5	0.145	1.1	TOSHIBA/东芝
SSM6N43FU	SOT-363	Dual N	20	0.5	0.63	1	TOSHIBA/东芝
SSM6N39TU	SOT-363	Dual N	20	1.6	0.119	1	TOSHIBA/东芝
SSM6N48FU	SOT-363	Dual N	30	0.1	3.2	1.5	TOSHIBA/东芝
SSM6N15FU	SOT-363	Dual N	30	0.1	4	1.5	TOSHIBA/东芝
T2N7002BKS	SOT-363	Dual N	60	0.3	1.6	2	TOSHIBA/东芝
SSM6N7002KFU	SOT-363	Dual N	60	0.3	1.5	2.1	TOSHIBA/东芝
SSM6N7002BFU	SOT-363	Dual N	60	0.2	2.1	3.1	TOSHIBA/东芝
EMH2412	SOT-323-8	Dual N	24	6	0.027	1.3	SANYO/三洋
EMH2411R	SOT-323-8	Dual N	30	5	0.0365	1.3	SANYO/三洋
SSM6N16FE	SOT-563-6/EMT6	Dual N	20	0.1	3	1.1	TOSHIBA/东芝
SSM6N37FE	SOT-563-6/EMT6	Dual N	20	0.25	2.2	1	TOSHIBA/东芝
SSM6N36FE	SOT-563-6/EMT6	Dual N	20	0.5	0.63	1	TOSHIBA/东芝
SSM6N15AFE	SOT-563-6/EMT6	Dual N	30	0.1	3.6	1.5	TOSHIBA/东芝
SSM6N15FE	SOT-563-6/EMT6	Dual N	30	0.1	4	1.5	TOSHIBA/东芝
AP6904GH-HF	SOT-252-4L	Dual N	30	22	0.18	3	AP/富鼎

Dual P-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
SSM6P39TU	SOT-363	Dual P	-20	-1.5	0.213	-1	TOSHIBA/东芝
SSM6P36FE	SOT-563-6/EMT6	Dual P	-20	-0.33	1.31	-1	TOSHIBA/东芝
TPCF8303	VS-8	Dual P	-20	0.3	0.058	-1.2	TOSHIBA/东芝
TPCF8302	VS-8	Dual P	-20	-3	0.059	-1.2	TOSHIBA/东芝
ECH8672	SOT-23-8	Dual P	-20	-3.5	0.085	-1.3	SANYO/三洋
FW163-TL-E	SOP-8	Dual P	-30	-7	0.025	-2.4	SANYO/三洋
AO8801	TSSOP-8	Dual P	-20	-4.7	0.042	-1	AO/万代
AON4807	DFN-8 3*2	Dual P	-30	-4	0.068	-2.3	AO/万代

Dual N+P-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
SSM6L35FE	SOT-563-6/EMT6	N+P	20	0.18	3	1	TOSHIBA/东芝
			-20	-0.1	8	-1	
SSM6L36FE	SOT-563-6/EMT6	N+P	20	0.5	0.66	1	TOSHIBA/东芝
			-20	-0.33	1.31	-1	
AON4605	DFN-8 3*2	N+P	30	4.3	0.05	2.5	AO/万代
			-30	-3.4	0.11	-2.4	
AO4600C	SOP-8	N+P	30	6.9	0.027	1.4	AO/万代
			-30	0.5	0.049	-1.4	
AO4619	SOP-8	N+P	30	7.4	0.024	3	AO/万代
			-30	-5.2	0.048	-3	

Low-Voltage, P-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
FDZ293P	WL-CSP 9L	P	-20	-4.6	0.046	-1.5	FAIRCHILD/仙童
AOC2403	DFN-4	P	-20	-1.8	0.095	-1	AO/万代
FDMA905P	DFN-6 2*2	P	-12	-10	0.016	-1	FAIRCHILD/仙童
SSM6J502NU	DFN-6 2*2	P	-20	-6	0.0231	-1	TOSHIBA/东芝
SSM6J503NU	DFN-6 2*2	P	-20	-6	0.0324	-1	TOSHIBA/东芝
SSM6J501NU	DFN-6 2*2	P	-20	-10	0.0153	-1	TOSHIBA/东芝
AON2707	DFN-6 2*2	P	-30	-4	0.117	-1.5	AO/万代
FDFM2P110	DFN-6 3*3	P	-20	-3.5	0.14	-1.5	FAIRCHILD/仙童
FDMC6683	DFN-8 3.3*3.3	P	-20	-54	0.0083	-1	FAIRCHILD/仙童
AP4435GYT-HF	DFN-8 3.3*3.3	P	-30	-11	0.021	-3	AP/富鼎

Low-Voltage, P-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V) max	Brand
A04771	SOP-8	P	-30	-4	0.068	-2.3	AO/万代
MDS3754ARH	SOP-8	P	-40	-6	0.045	-3	MagnaChip/美格纳
TPCF8102	VS-8	P	-20	-6	0.03	-1.2	TOSHIBA/东芝
TPCF8108LF	VS-8	P	-20	-7	0.026	-1.2	TOSHIBA/东芝
SSM3J331R	SOT-23	P	-20	-4	0.055	-1	TOSHIBA/东芝
AP2319GN-HF	SOT-23	P	-30	-3.1	0.09	-3	AP/富鼎
SSM3J332R	SOT-23	P	-30	-6	0.042	-1.2	TOSHIBA/东芝
TPC6104	SOT-23-6	P	-20	-5.5	0.04	-1.2	TOSHIBA/东芝
CPH6332	SOT-23-6	P	-20	-6	0.036	-1.4	SANYO/三洋
SH3433CDV-T1-GE3	SOT-23-6	P	-20	0.6	0.038	-1	VISHAY/威世
AO6701L	SOT-23-6	P	-30	-2.3	0.135	-1.4	AO/万代
NDC652P	SOT-23-6	P	-30	-2.4	0.11	-3	FAIRCHILD/仙童
FDC654P	SOT-23-6	P	-30	-3.6	0.075	-3	FAIRCHILD/仙童
TPCP8101	SOT-23-8	P	-20	-5.6	0.03	-1.2	TOSHIBA/东芝
SSM3J108TU	SOT-323	P	-20	-1.8	0.158	-1	TOSHIBA/东芝
SSM3J135TU	SOT-323	P	-20	-3	0.103	-1	TOSHIBA/东芝
SSM3J134TU	SOT-323	P	-20	-3.2	0.093	-1	TOSHIBA/东芝
SSM3J120TU	SOT-323	P	-20	-4	0.038	-1	TOSHIBA/东芝
SSM3J130TU	SOT-323	P	-20	-4.4	0.0258	-1	TOSHIBA/东芝
SSM3J129TU	SOT-323	P	-20	-4.6	0.046	-1	TOSHIBA/东芝
SSM3J133TU	SOT-323	P	-20	-5.5	0.0298	-1	TOSHIBA/东芝
SSM3J117TU	SOT-323	P	-30	-2	0.117	-2.6	TOSHIBA/东芝
SSM6J412TU	SOT-363	P	-20	-4	0.0996	-1	TOSHIBA/东芝
SSM6J409TU	SOT-363	P	-20	-9.5	0.0221	-1	TOSHIBA/东芝
SSM6J401TU	SOT-363	P	-30	-2.5	0.073	-2.6	TOSHIBA/东芝
AO5401E	SOT-416SOT-623	P	-20	-0.5	0.8	-0.9	AO/万代
SSM6J23FE	SOT-563-6EMTB	P	-12	-1.2	0.16	-1.1	TOSHIBA/东芝
SSM3J56MFV	SOT-723	P	-20	-0.8	0.39	-1	TOSHIBA/东芝
SSM3J16FV	SOT-723	P	-20	-0.1	8	-1.1	TOSHIBA/东芝
SSM3J15FV	SOT-723	P	-30	-0.1	12	-1.7	TOSHIBA/东芝
TJ15P04M3	SOT-252	P	-40	-15	0.036	-2	TOSHIBA/东芝
PA102FDG	SOT-252	P	-20	-10	0.115	-1.2	NIKO/尼克森微
UD3013	SOT-252	P	-30	-27	0.03	-2.5	Unitpower
EMB40P04A	SOT-252	P	-40	-12	0.0405	--	EMC/杰力
QM4013AD	SOT-252	P	-40	-20	0.045	-3	UBIQ/力祥半导体
AP9575AGH-HF	SOT-252	P	-60	-17	0.064	-3	AP/富鼎
IRL5602STRR	SOT-263	P	-20	-24	0.042	-1	IR
NDB6030PL	SOT-263	P	-30	-30	0.042	-2	NS/国半
P2003ETF	TO-220F	P	-30	-26	0.02	-3	NIKO/尼克森微
AP40P03GI-HF	TO-220F	P	-30	-30	0.028	-3	AP/富鼎
PA610DTF	TO-220F	P	-100	-10	0.2	-4	NIKO/尼克森微

Active component

MOSFET

Medium-Voltage, P-Channel

产品型号	封装	极性	电压	电流	电阻	开启电压	品牌
Part No.	Package	Channel	V _{DS} (V)	I _D (A)	R _{DS(ON)} (Ω) max	V _{GS(th)} (V)max	Brand
KJ9575	SOT-252	P	-60	-15	0.09	--	KINGWELL/皇纬
EMB40P06A	SOT-252	P	-60	-17	0.062	-3	EMC/杰力
SFR9224TM	SOT-252	P	-250	-2.5	2.4	-4	FAIRCHILD/仙童
IRF9510STRL	SOT-263	P	-100	-4	1.2	-4	IR
FQU8P10TU	TO-251	P	-100	-6.6	0.53	-4	FAIRCHILD/仙童
2SJ653-TH	TO-220F	P	-60	-37	0.025	-2.6	SANYO/三洋
IRFI9634GPBF	TO-220F	P	-250	-4.1	1	-4	VISHAY/威世

Active component

IGBT

产品型号	产品类型	封装	电压	电流	内置二极管	品牌
Part No.	Type	Package	V _{CES} (V)	I _C (A)	Built-in Diode	Brand
TIG062E8-TL-H	IGBT	SOT-23-8	400	100	有	SANYO/三洋
TIG032TS-S-TL-E	IGBT	TSSOP-8	400	150	有	SANYO/三洋
STGB20NB41LZT4	IGBT	SOT-263	412	20	有	ST/意法半导体
IRG4BC15UD-STRL	IGBT	SOT-263	600	7.8	有	IR
IRG4BC30FD-STRR	IGBT	SOT-263	600	17	有	IR
IRG4BC30S-STRR	IGBT	SOT-263	600	18	无	IR
GT45F127	IGBT	TO-220F	300	120	--	TOSHIBA/东芝
RJP3047ADPP-E1	IGBT	TO-220F	330	90	--	RENESAS/瑞萨
GT30F126	IGBT	TO-220F	330	120	无	TOSHIBA/东芝
RJP4055DPP-91	IGBT	TO-220F	400	40	--	RENESAS/瑞萨
GT30G121	IGBT	TO-220F	400	120	--	TOSHIBA/东芝
TIG056BF	IGBT	TO-220F	400	240	有	SANYO/三洋
RJP4065DPP-CO	IGBT	TO-220F	430	40	--	RENESAS/瑞萨
GT30G124	IGBT	TO-220F	430	120	--	TOSHIBA/东芝
STGF8NC60KD	IGBT	TO-220F	600	8	有	ST/意法半导体
AOTF15B60D2	IGBT	TO-220F	600	15	有	AO/万代
RJP6055DPP-90	IGBT	TO-220F	630	40	-	RENESAS/瑞萨
AOTF10B65M1	IGBT	TO-220F	650	10	有	AO/万代
MBQ40T65FDSC TH-B	IGBT	TO-247	650	40	有	MagnaChip/美格纳
STGW40H65DFB	IGBT	TO-247	650	40	有	ST/意法半导体
IRG7PH35UD1-EP	IGBT	TO-247	1200	25	有	IR
IRG7PH42UD-EP	IGBT	TO-247	1200	45	有	IR
IRG7PH42U-EP	IGBT	TO-247	1200	60	无	IR
AP30G120Sw	IGBT	TO-3P	1200	30	有	AP/富鼎
AP30G120W	IGBT	TO-3P	1200	30	无	AP/富鼎
GT40QR21	IGBT	TO-3P	1200	35	有	TOSHIBA/东芝

Active component

Schottky

产品型号	产品类型	封装	电压	电流	构造	品牌
Part No.	Type	Package	V _{RRM} (V)	I _F (AV)(A)	Configuration	Brand
CUS551V30	肖特基	SOD-323	30	0.5	单管	TOSHIBA/东芝
CUS10F30	肖特基	SOD-323	30	1	单管	TOSHIBA/东芝
MBRS15H45CT	肖特基	SOT-263	45	15	共阴	TSC/台半
STPS3045CGC-TR	肖特基	SOT-263	45	30	共阴	ST/意法半导体
SBR20A40CT-G	肖特基	TO-220	40	20	共阴	DIODES/美台
MBR2045CT-L	肖特基	TO-220	45	20	共阴	DIODES/美台
MBR2045CTP	肖特基	TO-220	45	20	共阴	DIODES/美台
MBR3045CT-L	肖特基	TO-220	45	30	共阴	DIODES/美台
SBR30A45CT-01	肖特基	TO-220	45	30	共阴	DIODES/美台
SBR30A50CT	肖特基	TO-220	50	30	共阴	DIODES/美台
MBR2060CT-E1	肖特基	TO-220	60	20	共阴	DIODES/美台
MBR2060CTP	肖特基	TO-220	60	20	共阴	DIODES/美台
MBR10100CT	肖特基	TO-220	100	10	共阴	DIODES/美台
MBR20100CT	肖特基	TO-220	100	20	共阴	DIODES/美台
SBR20100CT-73	肖特基	TO-220	100	20	共阴	DIODES/美台
SBR20100CTP	肖特基	TO-220	100	20	共阴	DIODES/美台
STPS30H100CTN	肖特基	TO-220	100	30	共阴	ST/意法半导体
V30100SG-E3/4W	肖特基	TO-220	100	30	单管	VISHAY/威世
MBR10H15OCT-E3/45	肖特基	TO-220	150	10	共阴	VSHAY/威世
SBR10U150CT	肖特基	TO-220	150	10	共阴	DIODES/美台
STPS20LCD45CFP	肖特基	TO-220F	45	20	共阴	ST/意法半导体
MBR3045CTF-E1	肖特基	TO-220F	45	30	共阴	BCD
SBR3060CTFP	肖特基	TO-220F	60	30	共阴	DIODES/美台
MBRF10100CT-JT	肖特基	TO-220F	100	10	共阴	DIODES/美台
SBT150-10LST	肖特基	TO-220F	100	15	共阴	SANYO/三洋
MBRF20150CT-LJ	肖特基	TO-220F	150	20	共阴	DIODES/美台
MBRF20H150CT-E3/45	肖特基	TO-220F	150	20	共阴	VSHAY/威世
MBRF20H200CT	肖特基	TO-220F	200	20	共阴	VISHAY/威世
STPS3045CW	肖特基	TO-247	45	30	共阴	ST/意法半导体
STPS30L45CW	肖特基	TO-247	45	30	共阴	ST/意法半导体
STPS4045CW	肖特基	TO-247	45	40	共阴	ST/意法半导体
C20T06QH-11A	肖特基	TO-262	60	20	共阴	NIEC/英达
STPS30SM100SR	肖特基	TO-262	100	30	单管	ST/意法半导体
VI30100SG-E3/4W	肖特基	TO-262	100	30	单管	VISHAY/威世

Active component FRED

产品型号	产品类型	封装	电压	电流	内置二极管	品牌
Part No.	Type	Package	V _{RRM} (V)	I _{F(AV)} (A)	Configuration	Brand
JL20A3V	快恢复	TO-220F	300	20	单管	JEON LUEN
RD2003JN	快恢复	TO-220F	300	20	单管	SANYO/三洋
RD2004JN	快恢复	TO-220F	400	20	单管	SANYO/三洋
LTTH1206DF	快恢复	TO-220F-2	600	12	单管	LITEON/光宝
SF20A600HT	快恢复	TO-220F-2	600	20	单管	AUK
STTH60P03SW	快恢复	TO-247	300	60	单管	ST/意法半导体
STTH30AC06CwL	快恢复	TO-247	600	30	共阴	ST/意法半导体
STTH30AC06CP	快恢复	TO-3P	600	30	共阴	ST/意法半导体
STTH6006W	快恢复	TO-247-2	600	60	单管	ST/意法半导体
VS-60EPU06PBF	快恢复	TO-247-2	600	60	单管	VISHAY/威世

Active component Transistor

产品型号	产品类型	封装	构造	集电极-基极电压	集电极-发射极电压	电流	品牌
Part No.	Type	Package	Configuration	V _{CBO} (V)	V _{CEO} (V)	I _c (A)	Brand
25C5455T1	三极管	SOT-143	NPN	9	6	0.1	RENESAS/瑞萨
BF771	三极管	SOT-23	NPN	20	12	0.08	infineon英飞凌
TMBT3904	三极管	SOT-23	NPN	60	50	0.15	TOSHIBA/东芝
TMBT3906	三极管	SOT-23	PNP	-50	-50	-0.15	TOSHIBA/东芝
RN1903	三极管	SOT-363	双NPN	50	50	0.1	TOSHIBA/东芝
RN4983	三极管	SOT-363	NPN	50	50	0.1	TOSHIBA/东芝
			PNP	-50	-50	-0.1	
25C5103	三极管	SOT-252	NPN	100	60	5	ROHM/罗姆
25C3303	三极管	252/251	NPN	100	80	5	TOSHIBA/东芝
MJD31C	三极管	SOT-252	NPN	100	100	3	ON
MJD41C	三极管	SOT-252	NPN	100	100	6	ON
MJD44H11	三极管	251/251	NPN	80	80	8	ON
25D1815	三极管	SOT-252	NPN	120	100	3	SANYO/三洋
25D1816	三极管	252/251	NPN	120	100	4	SANYO/三洋
25C6076	三极管	SOT-252	NPN	160	80	3	TOSHIBA东芝
KTC2016-Y-U	三极管	TO-220	NPN	60	60	3	KEC
BD243C	三极管	TO-220	NPN	100	100	6	ST/意法半导体
25C5172	三极管	TO-220F	NPN	600	400	5	TOSHIBA/东芝
BUL742CFP	三极管	TO-220F	NPN	1050	400	4	ST/意法半导体
25A1208T-A	三极管	10-921	PNP	-180	-160	-0.07	SANYO/三洋

Active component

Transistor

产品型号	产品类型	封装	构造	集电极-基极电压	集电极-发射极电压	电流	品牌
Part No.	Type	Package	Configuration	V _{CB0} (V)	V _{CE0} (V)	I _c (A)	Brand
PTD958G	三极管	SOT-252	PNP	-30	-20	-5	POWER
2SB1205	三极管	252/251	PNP	-25	-20	-5	SANYO/三洋
2SB1412	三极管	252/251	PNP	-30	-20	-5	ROHM/罗姆
2SA1615	三极管	252/251	PNP	-30	-20	-10	NEC
2SA1242	三极管	252/251	PNP	-35	-20	-5	TOSHIBA/东芝
HI772P	三极管	TO-251	PNP	-40	-30	-3	HUI/华昕
2SB772	三极管	252/251	PNP	-40	-30	-3	--
2SB1182	三极管	SOT-252	PNP	-40	-32	-2	ROHM/罗姆
STA3250D	三极管	SOT-252	PNP	-50	-50	-2	AUK
2SA2039	三极管	252/251	PNP	-50	-50	-5	SANYO/三洋
2SA2040	三极管	252/251	PNP	-50	-50	-8	SANYO/三洋
2SB1202	三极管	252/251	PNP	-60	-50	-3	SANYO/三洋
2SB1203	三极管	252/251	PNP	-60	-50	-5	SANYO/三洋
2SB1204	三极管	252/251	PNP	-60	-50	-8	SANYO/三洋
2SB1184	三极管	252/251	PNP	-60	-50	-3	ROHM/罗姆
2SA1244	三极管	252/251	PNP	-60	-50	-5	TOSHIBA/东芝
2SB1261	三极管	252/251	PNP	-60	-60	-3	NEC
2SA1385	三极管	252/251	PNP	-60	-60	-5	NEC
MJD2955	三极管	SOT-252	PNP	-70	-60	-10	ON
MJD45H11	三极管	251/251	PNP	-80	-80	-8	ON
MJD32C	三极管	251/251	PNP	-100	-100	-3	ON
MJD42C	三极管	SOT-252	PNP	-100	-100	-6	ON
2SA1952	三极管	SOT-252	PNP	-100	-60	-5	ROHM罗姆
2SB1216	三极管	252/251	PNP	-120	-100	-4	SANYO/三洋
2SA1552-TL-H	三极管	SOT-252	PNP	-180	-160	-1.5	SANYO/三洋
HI350	三极管	T0-251	PNP	-300	-300	-0.5	HUI/华昕
2SD882	三极管	89/252/251	NPN	40	30	3	NEC
2SD1758	三极管	252/251	NPN	40	32	2	ROHM/罗姆
2SC3072	三极管	252/251	NPN	50	20	5	TOSHIBA/东芝
2sC3074	三极管	252/251	NPN	60	50	5	TOSHIBA/东芝
2SD1760	三极管	252/251	NPN	60	50	3	ROHM/罗姆
2SD1805	三极管	252/251	NPN	60	20	5	SANYO/三洋
2SD1802	三极管	252/251	NPN	60	50	3	SANYO/三洋
2SD1803	三极管	252/251	NPN	60	50	5	SANYO/三洋
2SD1804	三极管	252/251	NPN	60	50	8	SANYO/三洋
2SD1899	三极管	252/251	NPN	60	60	3	NEC
2SC3518	三极管	252/251	NPN	60	60	5	NEC
MJD3055	三极管	252/251	NPN	70	60	10	ON
2SC5706	三极管	252/251	NPN	80	50	5	SANYO/三洋
2SC5707	三极管	252/251	NPN	80	50	8	SANYO/三洋

Activecomponent

LDO

产品型号	产品类型	封装	输出电压	输出电流	品牌
Part No.	Type	Package	Vout(V)	Iout(A)	Brand
BA7807FP-EL	三端稳压	SOT-252	7	1	ROHM/罗姆
KIA7808API-U	三端稳压	TO-220F	8	1	KEC
L1481T-5	四端稳压	TO-220F-4	5	2	NIKO/尼克森微
TCR5AM11	精密稳压	DFN-5 1.2*1.2	1.1	0.5	TOSHIBA/东芝
RC1117ST	精密稳压	SOT-223	1.25	1	FAIRCHILD/仙童
AS1117L-1.8/TR-LF	精密稳压	SOT-223	1.8	0.8	AS
AMC1117-2.5SKT	精密稳压	SOT-223	2.5	1	AMC
APL1085UC-TRL	精密稳压	SOT-252	3.3	3	茂达
AS1117R-2.5/TR	精密稳压	SOT-252	2.5	0.8	AS
AP1084B-25T6R1	精密稳压	SOT-252	2.5	5	AVD/合邦
AIC1723-50CETR	精密稳压	SOT-252	5	0.5	AIC/沛亨
GM6605-ATA3	精密稳压	SOT-263	1.15	5	GAMMA
AZ1084S2-1.8TRE1	精密稳压	SOT-263	1.8	5	BCD
CS5257A1GDPR5	精密稳压	SOT-263-5	1.25	7	Cherry
FAN1582M25X	精密稳压	SOT-263-5	2.5	3	FAIRCHILD/仙童
AIC1734-25CXATR	精密稳压	SOT-89	2.5	0.3	AIC/沛亨
DF1084T-ADJ	精密稳压	TO-220	3.3	5	DF/上海大缔
CS5207-1GT3	精密稳压	TO-220	13	7	Cherry
LF60cv	精密稳压	TO-220	6	0.5	ST/意法半导体
LD1086V90	精密稳压	TO-220	9	1.5	ST/意法半导体

Passive component

OCEP

4N25	6N135	H11L1	MOC3010	MOC3061	TP112	TLP550
4N26	6N136	H11AA1	MOC3011	MOC3063	TLP113	TLP559
4N27	6N137	H11AA2	MOC3020	MOC3081	TLP181	TLP620
4N28	6N138	H11D1	MOC3021	MOC3082	TLP250	TLP621
4N32	6N139	H11G1	MOC3022	MOC3083	TLP521-1	TLP627
4N33	HCPL181	PC923	MOC3023	MOC8050	TLP521-2	TLP651
4N35	HCPL3120	PC910	MOC3030	CNY65	TLP521-4	TLP781
4N37	PS2501	PC814	MOC3040	CNY17-2	TLP523	TLP785
4N38	PS2561	PC817	MOC3041	CNY17-3	TLP525	TLP2531
4N39	PS2801	PC123	MOC3052	CNY17-4	TLP541	TLP3063

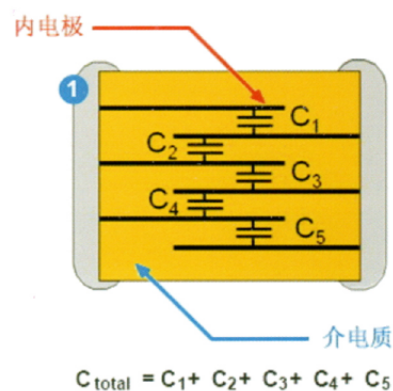
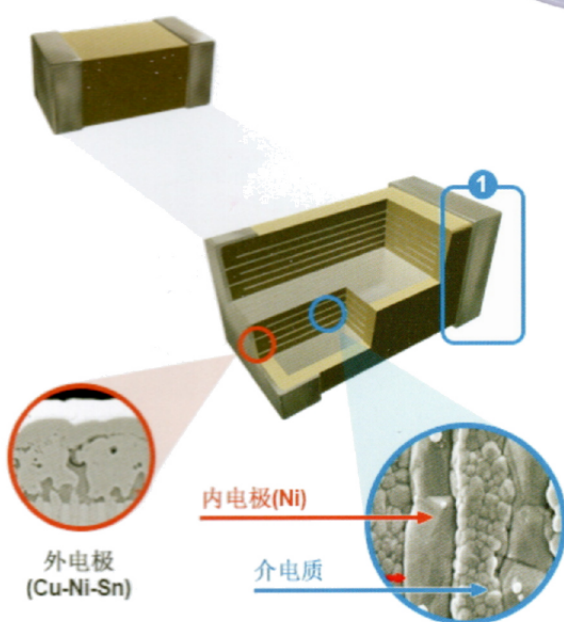
Passive component

SAMSUNG

capacitance

拥有开发微型、超高容量产品的各种核心技术

- Finer Grain BaTiO₃ 粉末合成技术
- Nano(<100nm) 微粒Powder分散技术
- 超薄型介电薄膜成型技术
- 形成高清晰内电极的技术



Passive component

SAMSUNG
capacitance

[illegible]

Size inch/(mm)	Thickness Max. (mm)	Rated Voltage (V)	Capacitance (nF)						
			0.1	0.22	0.47	1.0	2.2	4.7	10
01005 (0402)	0.22	10							
0201 (0603)	0.33	10							
	0.33	16/25							
	0.33	50							

Size inch/(mm)	Thickness Max. (mm)	Rated Voltage (V)	Capacitance (nF)											
			0.1		0.22		0.47		1.0	2.2		4.7		10
			10	22	47	100	220	470	1.0	2.2	4.7	10	22	47
0402 (1005)	0.55 ~ 0.60	6.3							X7T					
	0.55 ~ 0.60	10						X7S						
	0.55 ~ 0.60	16												
	0.55	25												
	0.55	50												
0603 (1608)	0.90 ~ 1.00	6.3										X7T		
	0.90 ~ 1.00	10												
	0.90 ~ 1.00	16												
	0.90 ~ 1.00	25												
	0.90 ~ 1.00	50												
	0.90	100												
0805 (2012)	1.35 ~ 1.45	6.3											X7S	
	1.35 ~ 1.45	10												
	1.35 ~ 1.45	16												
	1.35 ~ 1.45	25								X7S				
	1.35 ~ 1.45	35												
	1.35 ~ 1.45	50												
	1.35 ~ 1.45	100							#					

Passive component

SAMSUNG
capacitance

[illegible][illegible][illegible]

SAMSUNG
capacitance

[illegible]

TC	Size inch/(mm)	Type	Thickness max.(mm)	Vr	Capacitance (nF)							
					10	22	47	100	220	470	1000	2200
	0302 (0906)	2- element	0.5	4.0								
				6.3								
				10								
4.0				6.3								
				10								
				16								
0.55				6.3								
				10								
				16								
				25								
X5R	0504 (1410)	2- element		6.3								
0.66				10								
				16								
				25								
				6.3								
0.88				10								
				16								
				25								
				6.3								
0805 (2012)		2- element	0.95	6.3								
				10								
				16								

[illegible]

Passive component

SAMSUNG

capacitance

[illegible]

Passive component

muRata

INNOVATOR IN ELECTRONICS

村田 电容

Product ID	CodeID	SeriesID
GR	J	Soft Termination Type
	M	Tin Plated Layer
	4	Only for Information Devices / Tip Ring
	7	Only for Camera Flash Circuit
ER	B	High Frequency Type
GQ	M	High Frequency for Flow/Reflow Soldering
GM	A	Monolithic Microchip
	D	for Bonding
GN	M	Capacitor Array
LL	L	LOW ESL Wide Width Type
	A	Eight-termination Low ESL Type
	M	Ten-termination Low ESL Type
GA	2	for AC250V(rms)
	3	Safety Standard Recognized Type
GJ	M	High Frequency Low Loss Type

Passive component

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INNOVATOR IN ELECTRONICS

村田 电容

Code	Dimension (L×W)	EIA
02	0.4×0.2mm	01005
03	0.6×0.3mm	0201
05	0.5×0.5mm	0202
08	0.8×0.8mm	0303
0D	0.38×0.38mm	015015
0M	0.9×0.6mm	0302
11	1.25×1.0mm	0504
15	1.0×0.5mm	0402
18	1.6×0.8mm	0603
1M	1.37×1.0mm	0504
21	2.0×1.25mm	0805
22	2.8×2.8mm	1111
31	3.2×1.6mm	1206
32	3.2×2.5mm	1210
42	4.5×2.0mm	1808
43	4.5×3.2mm	1812
52	5.7×2.8mm	2211
55	5.7×5.0mm	2220

Code	Dimension (T)
2	0.2mm
2	2-elements (Array Type)
3	0.3mm
4	4-elements (Array Type)
5	0.5mm
6	0.6mm
7	0.7mm
8	0.8mm
9	0.85mm
A	1.0mm
B	1.25mm
C	1.6mm
D	2.0mm
E	2.5mm
F	3.2mm
M	1.15mm
N	1.35mm
Q	1.5mm
R	1.8mm
S	2.8mm
X	Depends on individual standards

Temperature Characteristic Codes			Temperature Characteristics			Operating
Code	Public STD Code		Reference Temperature	Temperature Range	Capacitance Change or Temperature Coefficient	
1X	SL *1	JIS	20°C	20 to 85°C	+350 to -1000ppm/°C	-55 to 125°C
2C	CH *1	JIS	20°C	20 to 125°C	0±60ppm/°C	-55 to 125°C
2P	PH *1	JIS	20°C	20 to 85°C	-150±60ppm/°C	-25 to 85°C
2R	RH *1	JIS	20°C	20 to 85°C	-220±60ppm/°C	-25 to 85°C
2S	SH *1	JIS	20°C	20 to 85°C	-330±60ppm/°C	-25 to 85°C
2T	TH *1	JIS	20°C	20 to 85°C	-470±60ppm/°C	-25 to 85°C
3C	CJ *1	JIS	20°C	20 to 125°C	0±120ppm/°C	-55 to 125°C
3P	PJ *1	JIS	20°C	20 to 85°C	-150±120ppm/°C	-25 to 85°C
3R	RJ *1	JIS	20°C	20 to 85°C	-220±120ppm/°C	-25 to 85°C
3S	SJ *1	JIS	20°C	20 to 85°C	-330±120ppm/°C	-25 to 85°C
3T	TJ *1	JIS	20°C	20 to 85°C	-470±120ppm/°C	-25 to 85°C
3U	UJ *1	JIS	20°C	20 to 85°C	-750±120ppm/°C	-25 to 85°C
4C	CK *1	JIS	20°C	20 to 125°C	0±250ppm/°C	-55 to 125°C
5C	C0G *1	EIA	25°C	25 to 125°C	0±30ppm/°C	-55 to 125°C
5G	X8G *1	EIA	25°C	25 to 150°C	0±30ppm/°C	-55 to 150°C
6C	C0H *1	EIA	25°C	25 to 125°C	0±60ppm/°C	-55 to 125°C
6P	P2H *1	EIA	25°C	25 to 85°C	-150±60ppm/°C	-55 to 125°C
6R	R2H *1	EIA	25°C	25 to 85°C	-220±60ppm/°C	-55 to 125°C
6S	S2H *1	EIA	25°C	25 to 85°C	-330±60ppm/°C	-55 to 125°C
6T	T2H *1	EIA	25°C	25 to 85°C	-470±60ppm/°C	-55 to 125°C
7U	U2J *1	EIA	25°C	25 to 125°C *6	-750±120ppm/°C	-55 to 125°C
B1	B *2	JIS	20°C	-25 to 85°C	±10%	-25 to 85°C
B3	B	JIS	20°C	-25 to 85°C	±10%	-25 to 85°C
C7	X7S	EIA	25°C	-55 to 125°C	±22%	-55 to 125°C
C8	X6S	EIA	25°C	-55 to 105°C	±22%	-55 to 105°C
D7	X7T	EIA	25°C	-55 to 125°C	+22, -33%	-55 to 125°C
D8	X6T	EIA	25°C	-55 to 105°C	+22, -33%	-55 to 105°C
E7	X7U	EIA	25°C	-55 to 125°C	+22, -56%	-55 to 125°C
F1	F *2	JIS	20°C	-25 to 85°C	+30, -80%	-25 to 85°C
F5	Y5V	EIA	25°C	-30 to 85°C	+22, -82%	-30 to 85°C
L8	X8L	*3	25°C	-55 to 150°C	+15, -40%	-55 to 150°C
R1	R *2	JIS	20°C	-55 to 125°C	±15%	-55 to 125°C
R3	R	JIS	20°C	-55 to 125°C	±15%	-55 to 125°C
R6	X5R	EIA	25°C	-55 to 85°C	±15%	-55 to 85°C
R7	X7R	EIA	25°C	-55 to 125°C	±15%	-55 to 125°C
R9	X8R	EIA	25°C	-55 to 150°C	±10% *4	-55 to 150°C
W0	-	-	25°C	-55 to 125°C	+22, -33% *5	-55 to 125°C

Passive component



村田 电容

Murata Code	Capacitance Change from 20°C(%)					
	-55°C		-25°C		-10°C	
	Max.	Min.	Max.	Min.	Max.	Min.
1X	-	-	-	-	-	-
2C	0.82	-0.45	0.49	-0.27	0.33	-0.18
2P	-	-	1.32	0.41	0.88	0.27
2R	-	-	1.70	0.72	1.13	0.48
2S	-	-	2.30	1.22	1.54	0.81
2T	-	-	3.07	1.85	2.05	1.23
3C	1.37	-0.90	0.82	-0.54	0.55	-0.36
3P	-	-	1.65	0.14	1.10	0.09
3R	-	-	2.03	0.45	1.35	0.30
3S	-	-	2.63	0.95	1.76	0.63
3T	-	-	3.40	1.58	2.27	1.05
3U	-	-	4.94	2.84	3.29	1.89
4C	2.56	-0.88	1.54	-0.13	1.02	-0.75

Murata Code	Capacitance Change from 25°C(%)					
	-55°C		-30°C		-10°C	
	Max.	Min.	Max.	Min.	Max.	Min.
5C/5G	0.58	-0.24	0.40	-0.17	0.25	-0.11
6C	0.87	-0.48	0.59	-0.33	0.38	-0.21
6P	2.33	0.72	1.61	0.50	1.02	0.32
6R	3.02	1.28	2.08	0.88	1.32	0.56
6S	4.09	2.16	2.81	1.49	1.79	0.95
6T	5.46	3.28	3.75	2.26	2.39	1.44
7U	8.78	5.04	6.04	3.47	3.84	2.21

Code	Rated Voltage	Code	Rated Voltage
0E	DC2.5V	2H	DC500V
0G	DC4V	2J	DC630V
0J	DC6.3V	3A	DC1kV
1A	DC10V	3D	DC2kV
1C	DC16V	3F	DC3.15kV
1E	DC25V	BB	DC350V (for Camera Flash Circuit)
YA	DC35V	E2	AC250V
1H	DC50V	GB	X2; AC250V (Safety Standard Recognized Type GB)
2A	DC100V	GC	X1/Y2; AC250V (Safety Standard Recognized Type GC)
2D	DC200V	GD	Y3; AC250V (Safety Standard Recognized Type GD)
2E	DC250V	GF	Y2, X1/Y2; AC250V (Safety Standard Recognized Type GF)
YD	DC300V		

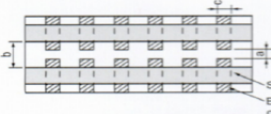
Code	Packaging
L	ø80mm Embossed Taping
D	ø80mm Paper Taping
E	ø80mm Paper Taping (LLL15)
K	ø30mm Embossed Taping
J	ø30mm Paper Taping
F	ø30mm Paper Taping (LLL15)
B	Bulk
C	Bulk Case
T	Bulk Tray

Passive component

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INNOVATOR IN ELECTRONICS

村田电容

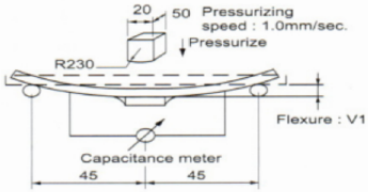
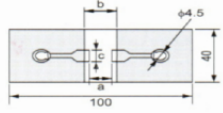
No.	Item	Specifications	Test Method																																																																									
1	Operating Temperature Range	B1, B3, F1: 75 C to +85C R1, R7, D7: 75 C to +125C C6, R6: 75 C to +85 C C7, E7: 75 C to +125 C C8, D8: 75 C to +105C F5: 70 C to +85 C	Reference Temperature: 20C (R6, R7, C6, C7, C8, D7, D8, E7, F5: 25C)																																																																									
2	Rated Voltage	See the previous pages.	The rated voltage is defined as the maximum voltage which may be applied continuously to the capacitor. When AC voltage is superimposed on DC voltage, V^{P-P} or V^{O-P} , whichever is larger, should be maintained within the rated voltage range.																																																																									
3	Appearance	No defects or abnormalities	Visual inspection																																																																									
4	Dimensions	Within the specified dimensions	Using calipers (GRM02 size is based on Microscope)																																																																									
5	Dielectric Strength	No defects or abnormalities	No failure should be observed when 250% of the rated voltage is applied between the terminations for 1 to 5 seconds, provided the charge/discharge current is less than 50mA.																																																																									
6	Insulation Resistance	More than 50 ΩF	The insulation resistance should be measured with a DC voltage not exceeding the rated voltage at Standard Temperature and 75%RH max. and within 1 minute of charging, provided the charge/discharge current is less than 50mA.																																																																									
7	Capacitance	Table 1 GRM155 B3/R6 1A 124 to 105 GRM185 B3/R6 1C/1A 105 GRM185 C8/D7 1A 105 GRM188 B3/R6 1C/1A 225 GRM188 R7/C8 1A 225 GRM188 B3/R6 1A 335 GRM219 B3/R6 1C/1A 475, 106 GRM219 C8 1A 475 GRM21B B3/R6 1C/1A 106 GRM21B R7/C8 1A 106 GRM319 B3/R6 1C/1A 106 Within the specified tolerance.	The capacitance should be measured at Standard Temperature at the frequency and voltage shown in the table. <table><tr><th>Capacitance</th><th>Frequency</th><th>Voltage</th></tr><tr><td>*1 CV10 F (10V min.)</td><td>1 0.1kHz</td><td>1.0 0.2Vrms</td></tr><tr><td>CV10 F (6.3V max.)</td><td>1 0.1kHz</td><td>0.5 0.1Vrms</td></tr><tr><td>CG10 F</td><td>120 24Hz</td><td>0.5 0.1Vrms</td></tr></table> *1 However the voltage is 0.5 0.1Vrms about Table 1 items on the left side.	Capacitance	Frequency	Voltage	*1 CV10 F (10V min.)	1 0.1kHz	1.0 0.2Vrms	CV10 F (6.3V max.)	1 0.1kHz	0.5 0.1Vrms	CG10 F	120 24Hz	0.5 0.1Vrms																																																													
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8	Dissipation Factor (D.F.)	Table 1 GRM155 B3/R6 1A 124 to 105 GRM185 B3/R6 1C/1A 105 GRM185 C8/D7 1A 105 GRM188 B3/R6 1C/1A 225 GRM188 R7/C8 1A 225 GRM188 B3/R6 1A 335 GRM219 B3/R6 1C/1A 475, 106 GRM219 C8 1A 475 GRM21B B3/R6 1C/1A 106 GRM21B R7/C8 1A 106 GRM319 B3/R6 1C/1A 106 B1, R1, B3, R6, R7, C7, C8, E7, D7: 0.1 max. C6, GRM31CR71E106 : 0.125 max. D8, GRM31CR60J107 : 0.15 max. F1, F5: 0.2 max.	The D.F. should be measured at Standard Temperature at the Frequency and voltage shown in the table. <table><tr><th>Capacitance</th><th>Frequency</th><th>Voltage</th></tr><tr><td>*1 CV10 F (10V min.)</td><td>1 0.1kHz</td><td>1.0 0.2Vrms</td></tr><tr><td>CV10 F (6.3V max.)</td><td>1 0.1kHz</td><td>0.5 0.1Vrms</td></tr><tr><td>CG10 F</td><td>120 24Hz</td><td>0.5 0.1Vrms</td></tr></table> *1 However the voltage is 0.5 0.1Vrms about Table 1 items on the left side.	Capacitance	Frequency	Voltage	*1 CV10 F (10V min.)	1 0.1kHz	1.0 0.2Vrms	CV10 F (6.3V max.)	1 0.1kHz	0.5 0.1Vrms	CG10 F	120 24Hz	0.5 0.1Vrms																																																													
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CV10 F (6.3V max.)	1 0.1kHz	0.5 0.1Vrms																																																																										
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9	Capacitance Temperature Characteristics	No bias B1, B3: Within +/70% (75 C to +85C) R1, R7: Within +/75% (75 C to +125C) R6: Within +/75% (75 C to +85 C) F1: Within +30/70% (75 C to +85C) C6: Within +/72% (75 C to +85C) C7: Within +/72% (75 C to +125C) C8: Within +/72% (75 C to +105C) E7: Within +22/76% (75 C to +125C) D7: Within +22/73% (75 C to +125C) D8: Within +22/73% (75 C to +105 C) F5: Within +22/72% (70 C to +85 C) 50% of the Rated Voltage B1: Within +10/70% R1: Within +15/70% F1: Within +30/75%	The capacitance change should be measured after 5min. at each specified temp.stage. The ranges of capacitance change compared with the Reference Temperature value over the temperature ranges shown in the table should be within the specified ranges.* In case of applying voltage, the capacitance change should be measured after 1 more min. with applying voltage in equilibration of each temp. stage. * GRM32DB10J226, GRM43 B1/B3/R6 0J/1A 336/476 only: 1.0 0.2Vrms <table><tr><th>Step</th><th>Temperature (C)</th><th>Applying Voltage (V)</th></tr><tr><td>1</td><td>20 2*</td><td>No bias</td></tr><tr><td>2</td><td>75 3 (for R1, R6, R7, C6, C7, C8, E7, D7, D8)</td><td>R6, R7, C6, C7, C8, D7, D8, E7, F5: 25 2C</td></tr><tr><td>3</td><td>20 2*</td><td></td></tr><tr><td>4</td><td>85 3 (for B1, B3, F1, F5, R6, C6) 125 3 (for R1, R7, C7, E7, D7) 105 3 (for C8, D8)</td><td></td></tr><tr><td>5</td><td>20 2</td><td></td></tr><tr><td>6</td><td>75 3 (for R1)</td><td>50% of the rated voltage</td></tr><tr><td>7</td><td>75 3 (for B1, F1)</td><td></td></tr><tr><td>8</td><td>20 2</td><td></td></tr><tr><td>9</td><td>125 3 (for R1)</td><td></td></tr><tr><td>10</td><td>85 3 (for B1, F1)</td><td></td></tr></table> Initial measurement Perform a heat treatment at 150+0/70 C for one hour and then set for 24 2 hours at room temperature. Perform the initial measurement. Solder the capacitor on the test jig (glass epoxy board) shown in Fig.1a using an eutectic solder. Then apply 10N* force in parallel with the test jig for 10 1sec. The soldering should be done either with an iron or using the reflow method and should be conducted with care so that the soldering is uniform and free of defects such as heat shock. *1N: GRM02, 2N: GRM03, 5N: GRM15/18 <table><tr><th>Type</th><th>a</th><th>b</th><th>c</th></tr><tr><td>GRM02</td><td>0.2</td><td>0.56</td><td>0.23</td></tr><tr><td>GRM03</td><td>0.3</td><td>0.9</td><td>0.3</td></tr><tr><td>GRM15</td><td>0.4</td><td>1.5</td><td>0.5</td></tr><tr><td>GRM18</td><td>1.0</td><td>3.0</td><td>1.2</td></tr><tr><td>GRM21</td><td>1.2</td><td>4.0</td><td>1.65</td></tr><tr><td>GRM31</td><td>2.2</td><td>5.0</td><td>2.0</td></tr><tr><td>GRM32</td><td>2.2</td><td>5.0</td><td>2.9</td></tr><tr><td>GRM43</td><td>3.5</td><td>7.0</td><td>3.7</td></tr><tr><td>GRM55</td><td>4.5</td><td>8.0</td><td>5.6</td></tr></table> (in mm)	Step	Temperature (C)	Applying Voltage (V)	1	20 2*	No bias	2	75 3 (for R1, R6, R7, C6, C7, C8, E7, D7, D8)	R6, R7, C6, C7, C8, D7, D8, E7, F5: 25 2C	3	20 2*		4	85 3 (for B1, B3, F1, F5, R6, C6) 125 3 (for R1, R7, C7, E7, D7) 105 3 (for C8, D8)		5	20 2		6	75 3 (for R1)	50% of the rated voltage	7	75 3 (for B1, F1)		8	20 2		9	125 3 (for R1)		10	85 3 (for B1, F1)		Type	a	b	c	GRM02	0.2	0.56	0.23	GRM03	0.3	0.9	0.3	GRM15	0.4	1.5	0.5	GRM18	1.0	3.0	1.2	GRM21	1.2	4.0	1.65	GRM31	2.2	5.0	2.0	GRM32	2.2	5.0	2.9	GRM43	3.5	7.0	3.7	GRM55	4.5	8.0	5.6
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10	Adhesive Strength of Termination	No removal of the terminations or other defects should occur.  Fig. 1a																																																																										

Passive component

muRata

INNOVATOR IN ELECTRONICS

村田电容

No.	Item	Specifications	Test Method																																							
11	Appearance	No defects or abnormalities	Solder the capacitor on the test jig (glass epoxy board) in the same manner and under the same conditions as (10). The capacitor should be subjected to a simple harmonic motion having a total amplitude of 1.5mm, the frequency being varied uniformly between the approximate limits of 10 and 55Hz. The frequency range, from 10 to 55Hz and return to 10Hz, should be traversed in approximately 1 minute. This motion should be applied for a period of 2 hours in each 3 mutually perpendicular directions (total of 6 hours).																																							
	Capacitance	Within the specified tolerance																																								
	D.F.	B1, R1, B3, R6, R7, C7, C8, E7, D7: 0.1 max. C6, GRM31CR71E106: 0.125 max. D8, GRM31CR60J107: 0.15 max. F1, F5: 0.2 max.																																								
12	Appearance	No marking defects	Solder the capacitor on the test jig (glass epoxy board) shown in Fig.2a using an eutectic solder. Then apply a force in the direction shown in Fig 3a for 5 1 sec. The soldering should be done by the reflow method and should be conducted with care so that the effects such as heat shock.																																							
	Capacitance Change	Within 10%																																								
	Deflection	 Fig. 3a	 Fig. 2a <table border="1"> <thead> <tr> <th>Type</th><th>a</th><th>b</th><th>c</th></tr> </thead> <tbody> <tr><td>GRM02</td><td>0.2</td><td>0.56</td><td>0.23</td></tr> <tr><td>GRM03</td><td>0.3</td><td>0.9</td><td>0.3</td></tr> <tr><td>GRM15</td><td>0.4</td><td>1.5</td><td>0.5</td></tr> <tr><td>GRM18</td><td>1.0</td><td>3.0</td><td>1.2</td></tr> <tr><td>GRM21</td><td>1.2</td><td>4.0</td><td>1.65</td></tr> <tr><td>GRM31</td><td>2.2</td><td>5.0</td><td>2.0</td></tr> <tr><td>GRM32</td><td>2.2</td><td>5.0</td><td>2.9</td></tr> <tr><td>GRM43</td><td>3.5</td><td>7.0</td><td>3.7</td></tr> <tr><td>GRM55</td><td>4.5</td><td>8.0</td><td>5.6</td></tr> </tbody> </table> (in mm)	Type	a	b	c	GRM02	0.2	0.56	0.23	GRM03	0.3	0.9	0.3	GRM15	0.4	1.5	0.5	GRM18	1.0	3.0	1.2	GRM21	1.2	4.0	1.65	GRM31	2.2	5.0	2.0	GRM32	2.2	5.0	2.9	GRM43	3.5	7.0	3.7	GRM55	4.5	8.0
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13	Solderability of Termination	75% of the terminations is to be soldered evenly and continuously.	Immerse the capacitor in a solution of ethanol (JIS-K-8101) and rosin (JIS-K-5902) (25% rosin in weight proportion). Preheat at 80 to 120C for 10 to 30 seconds. After preheating, immerse in an eutectic solder solution for 2 0.5 seconds at 230 5 C or Sn-3.0Ag-0.5 Cu solder solution for 2 0.5 seconds at 245 5C.																																							
14	Appearance	No defects or abnormalities	Preheat the capacitor at 120 to 150C for 1 minute. Immerse the capacitor in an eutectic solder solution* or Sn-3.0Ag-0.5Cu solder solution at 270 5C for 10 0.5 seconds. Set at room temperature for 24 2 hours, then measure. *Not apply to GRM02 Initial measurement Perform a heat treatment at 150+0/0 C for one hour and then set at room temperature for 24 2 hours. Perform the initial measurement. *Preheating for GRM32/43/55																																							
	Capacitance Change	B1, R1, B3, R6, R7, C6, C7, C8, E7, D7, D8: Within 7.5% GRM188R60J106M: Within 12.5% F1, F5: Within 20%																																								
	D.F.	B1, R1, B3, R6, R7, C7, C8, E7, D7: 0.1 max. C6, GRM31CR71E106: 0.125 max. D8, GRM31CR60J107: 0.15 max. F1, F5: 0.2 max.																																								
	I.R.	More than 50 ?F																																								
	Dielectric Strength	No defects																																								
15	Appearance	No defects or abnormalities	Fix the capacitor to the supporting jig in the same manner and under the same conditions as (10). Perform the five cycles according to the four heat treatments shown in the following table. Set for 24 2 hours at room temperature, then measure.																																							
	Capacitance Change	B1, R1, B3, R6, R7, C6, C7, C8, D7, D8: Within 7.5% E7: Within 30% F1, F5: Within 20%																																								
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	I.R.	More than 50 ?F																																								
	Dielectric Strength	No defects																																								
16	Appearance	No defects or abnormalities	Apply the rated voltage at 40 2C and 90 to 95% humidity for 500 12 hours. The charge/discharge current is less than 50mA. Initial measurement Perform a heat treatment at 150+0/0 C for one hour and then let sit for 24 2 hours at room temperature. Perform the initial measurement. Measurement after test Perform a heat treatment and then let sit for 24 2 hours at room temperature, then measure.																																							
	Capacitance Change	B1, R1, B3, R6, R7, C6, C7, C8, E7, D7, D8: Within 12.5% F1, F5: Within 30%																																								
	D.F.	B1, R1, B3, R6, R7, C6, C7, C8, E7, D7, D8: 0.2 max. F1, F5: 0.4 max.																																								
17	I.R.	More than 12.5 ?F	Apply 150% of the rated voltage for 1000 12 hours at the maximum operating temperature 3 C. The charge/discharge current is less than 50mA. Initial measurement Perform a heat treatment at 150+0/0 C for one hour and then let sit for 24 2 hours at room temperature. Perform the initial measurement. Measurement after test Perform a heat treatment and then let sit for 24 2 hours at room temperature, then measure.																																							
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17	D.F.	B1, R1, B3, R6, R7, C6, C7, C8, E7, D7, D8: 0.2 max. F1, F5: 0.4 max.	Apply 150% of the rated voltage for 1000 12 hours at the maximum operating temperature 3 C. The charge/discharge current is less than 50mA. Initial measurement Perform a heat treatment at 150+0/0 C for one hour and then let sit for 24 2 hours at room temperature. Perform the initial measurement. Measurement after test Perform a heat treatment and then let sit for 24 2 hours at room temperature, then measure.																																							
	I.R.	More than 25 ?F																																								
	Appearance	No defects or abnormalities																																								

Passive component



High Frequency Multilayer Chip Inductor	VHF0603(0201)	0.6NH-120NH
	VHF1005(0402)	1NH-220NH
	VHF1608(0603)	1NH-270NH
	VHF2012(0805)	1.5NH-680NH
large current multilayer inducto	CMP/CMH2012(0805)	0.047UN-22UH
	CMP/CMH1608(0603)	0.047UN-12UH
	CMP/CMH2520(1008)	1UH-4.7UH
	CMP/CMH3216(1206)	1UH-18UH
Large Current Bead	CBW/CBM1005(0402)	0R-1000R
	CBW/CBM1608(0603)	0R-2000R
	CBW/CBM2012(0805)	0R-2000R
	CBW/CBM3216(1206)	0R-2000R
Commoncurrentbeads	CBG1005(0402)	0R-1800R
	CBG1608(0603)	0R-2700R
	CBG2012(0805)	0R-3200R
	CBG3216(1206)	0R-3200R

General multilayer inductors	CMI1608(0603)	0.1UH-33UH
	CMI2012(0805)	0.1UH-47UH
	CMI3216(1206)	0.1UH-120UH
	CMI3225(1210)	1UH-220UH
	CMI4532(1812)	1UH-330UH
Winding power inductors	FHW0402	1NH-120NH
	FHW0603	1.6NH-470NH
	FHW0805	2.2NH-33UH
	FHW1008	3.9NH-220UH
	FHW1210	3.9NH-1000UH
	FHW1812	0.33UH-1000UH