

SS52-SS510

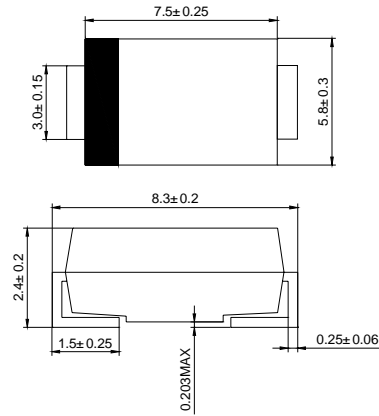
Surface Mount Schottky Barrier Rectifiers

REVERSE VOLTAGE: 20 --- 100 V

CURRENT: 5.0 A



SMC



Dimensions in millimeters

Features

- Plastic package has Underwriters Laborator Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- High surge capability
- High current capability, low forward voltage drop
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

Mechanical Data

- Case: JEDEC SMC, molded plastic over passivated chip
- Polarity: Color band denotes cathode end
- Weight: 0.007 ounces, 0.21 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		SS52	SS53	SS54	SS55	SS56	SS58	SS59	SS510	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum average forward rectified current at T_L (SEE FIG. 1) (NOTE 2)	$I_{(AV)}$	5.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175								A
Maximum instantaneous forward voltage at 5.0A (NOTE 1)	V_F	0.55			0.70		0.85			V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage (NOTE 1) @ $T_A=100^\circ\text{C}$	I_R	0.5								mA
		20					10			
Typical thermal resistance (NOTE 2)	R_{JA}	55								°C/W
	R_{JL}	17								
Operating junction temperature range	T_J	-55 --- +150								°C
Storage temperature range	T_{STG}	-55 --- +150								°C

NOTE: 1. Pulse test: 300 μ s pulse width, 1% duty cycle

2. P.C.B. mounted with 0.55"X0.55" (14.0X14.0mm²) copper pad areas

SS52-SS510

Surface Mount Schottky Barrier Rectifiers

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

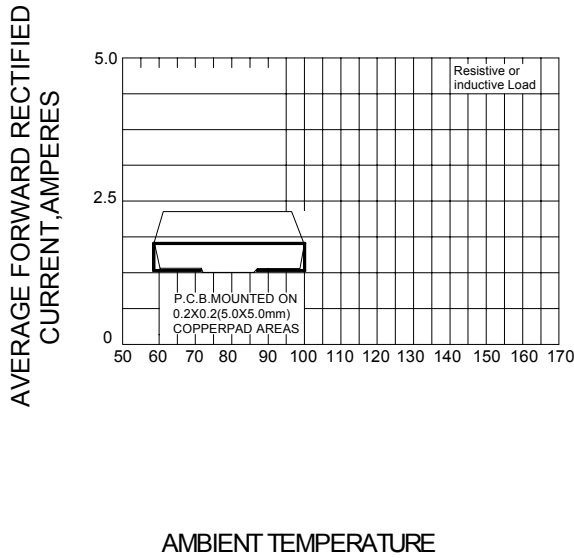


FIG.2– PEAK FORWARD SURGE CURRENT

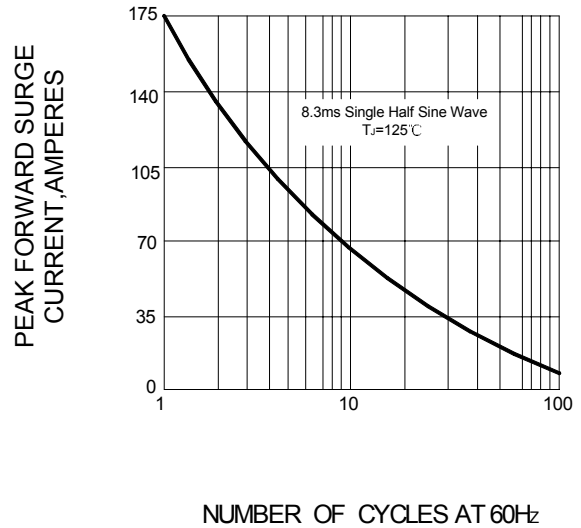


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

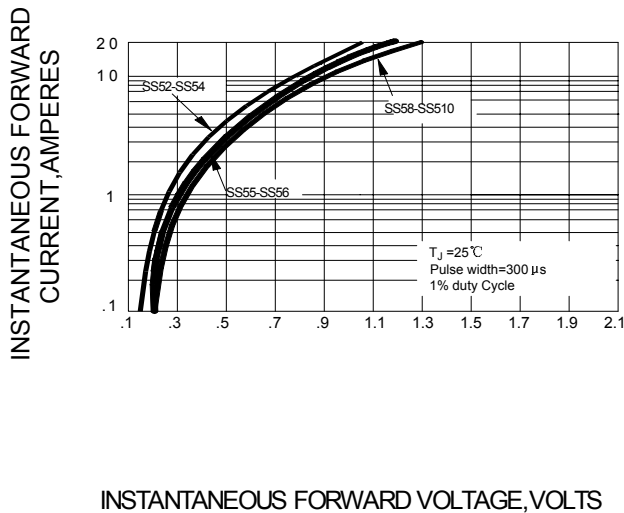
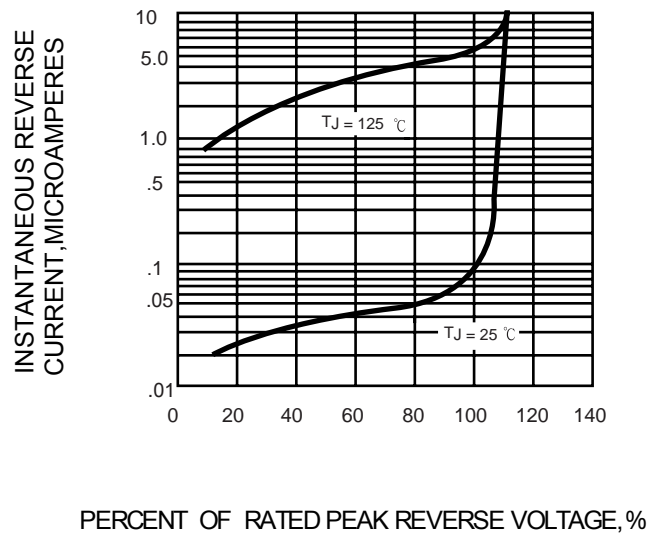


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Schottky Diodes & Rectifiers](#) category:

Click to view products by [LGE](#) manufacturer:

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [GS1JE-TP](#) [RB160M-50TR](#) [BAS 3010S-02LRH E6327](#)
[BAT 54-02LRH E6327](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SB1003M3-TL-W](#)
[SBAT54CWT1G](#) [SBM30-03-TR-E](#) [SK310-T](#) [SK33A-TP](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#)
[MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [BAS 70-02L E6327](#) [DMJ3940-000](#) [SB007-03C-TB-E](#) [SB10015M-TL-E](#) [SB1003M3-TL-E](#) [SK32A-](#)
[TP](#) [SK33B-TP](#) [SK35A-TP](#) [SK38B-LTP](#) [SK38B-TP](#) [NRVBM120LT1G](#) [NTE505](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#)
[CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA140-HF](#) [ACDBA2100-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#)
[CDBQC0530L-HF](#) [BAT54-13-F](#) [ACDBA340-HF](#)