

Surface Mount Fast Recovery Rectifiers

 Lead(Pb)-Free

Features:

- * Surface mount device
- * High surge current capability
- * Low reverse current
- * Component in accordance to RoHS 2002/95/EC

Mechanical Data:

- * Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- * Terminals: Lead free Plating (Tin Finish)
Solderable per MIL-STD-202, Method 208
- * Polarity: Cathode Band
- * Weight: 0.231 grams (approximate)

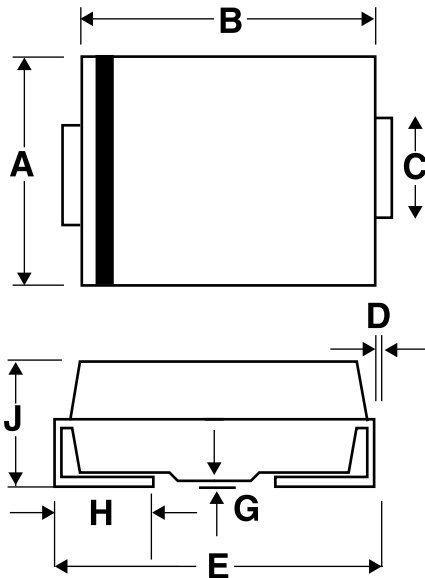
REVERSE VOLTAGE
50 TO 1000 VOLTS
FORWARD CURRENT
3.0 AMPERE



SMC(DO-214AB)

SMC Outline Dimension

Unit:mm



SMC		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62

Maximum Ratings and Electrical Characteristics

(TA=25°C unless otherwise noted)

Characteristics	Symbol	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	IF(AV)	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	IFSM	80.0							A
Maximum Instantaneous At 3.0A DC	VF	1.30							V
Maximum DC Reverse Current @Tj=25 C° At Rated DC Blocking Voltage @Tj=100 C°	IR	10 100							uA
Maximum Reverse Recovery Time(Note1)	Trr	150				250	500		nS
Typical Junction Capacitance (Note 2)	Cj	50							Pf
Operating Temperature Range	Tj	-55 to+150							°C
Storage Temperature Range	TSTG	-55 to+150							°C

NOTES:1. Measured with IF=0.5A,IR=1A,IRR=0.25A

2. Measured t 1.0MHZ and applied reverse voltage of 4.0V DC

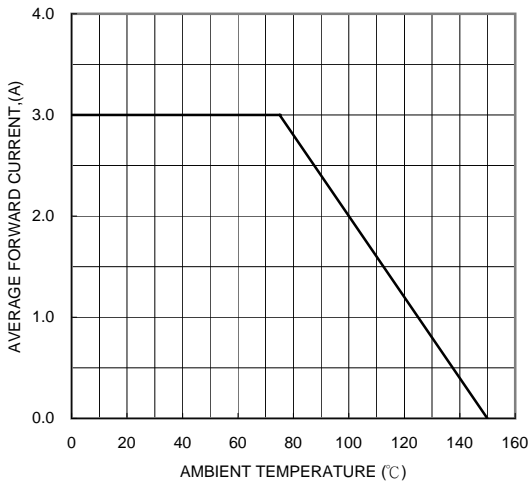


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

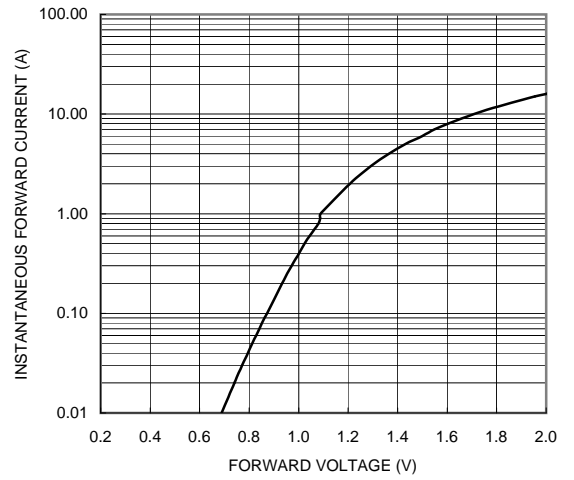


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

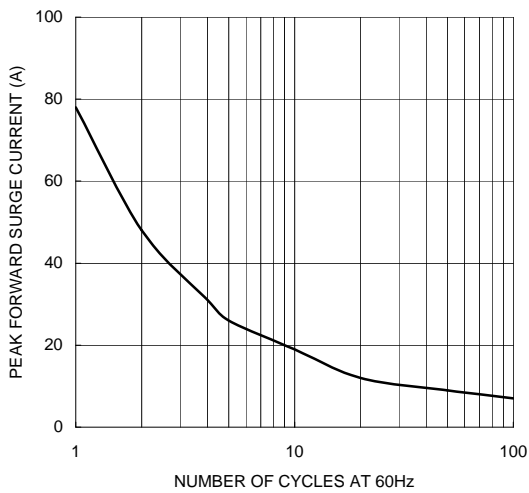


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

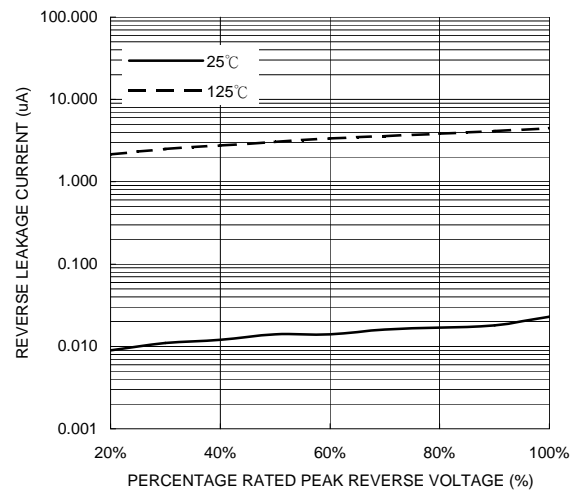


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

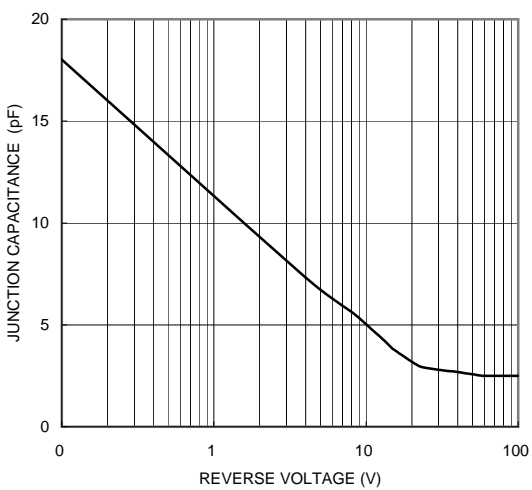


FIG. 5-TYPICAL JUNCTION CAPACITANCE