

Features

- For surface mount applications
- Glass Passivated Chip Junction
- Low profile package
- Easy to pick and place

SMC



1.Cathode —|<— 2.Anode

Marking Code:

S3AC-TN: S3A
S3BC-TN: S3B
S3DC-TN: S3D
S3GC-TN: S3G
S3JC-TN: S3J
S3KC-TN: S3K
S3MC-TN: S3M

Maximum Ratings and Electrical Characteristics

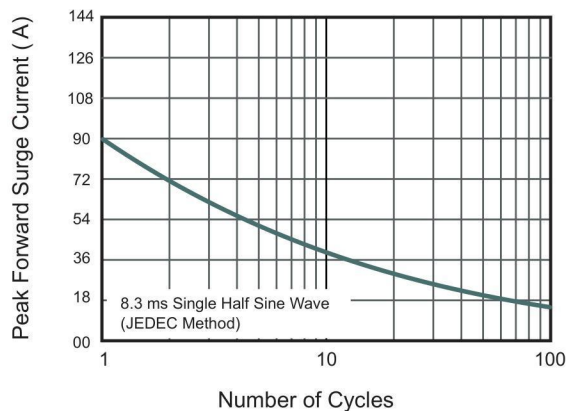
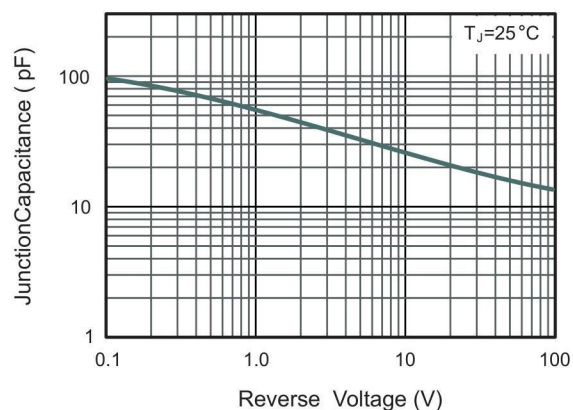
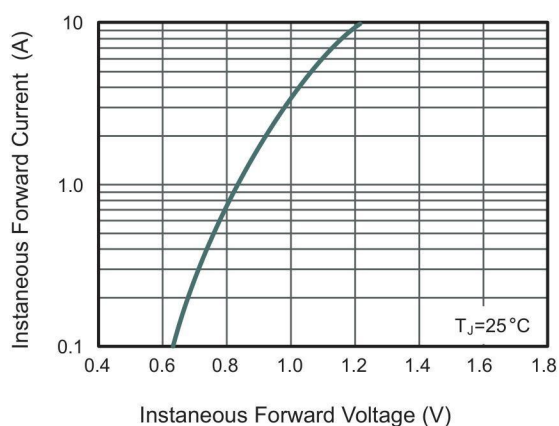
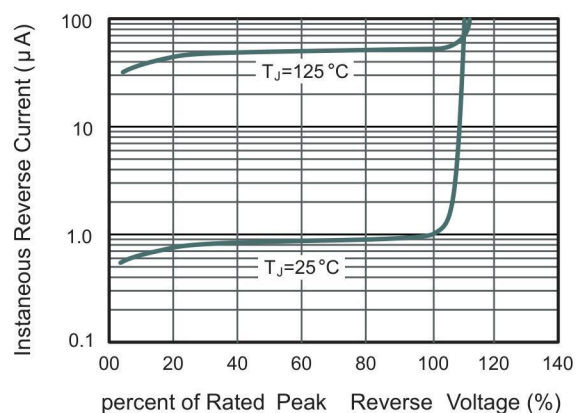
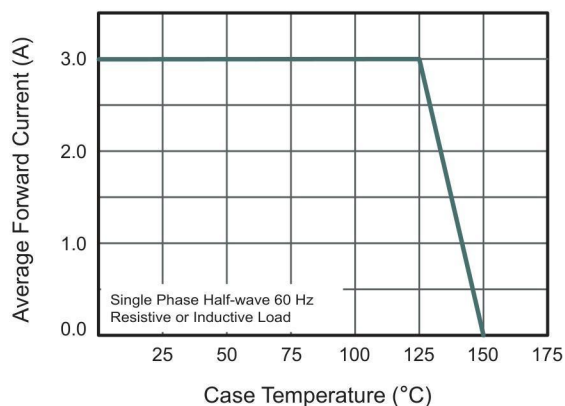
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	S3AC-TN	S3BC-TN	S3DC-TN	S3GC-TN	S3JC-TN	S3KC-TN	S3MC-TN	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	90							A
Maximum Instantaneous Forward Voltage at 3 A	V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25\text{ }^{\circ}\text{C}$ $T_A = 125\text{ }^{\circ}\text{C}$	I_R	5 100							μA
Typical Junction Capacitance ^{Note1}	C_j	40							pF
Typical Thermal Resistance ^{Note2}	$R_{\theta JA}$ $R_{\theta JC}$	40 16							$^{\circ}\text{C/W}$
Junction Temperature	T_J	150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^{\circ}\text{C}$

Note:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

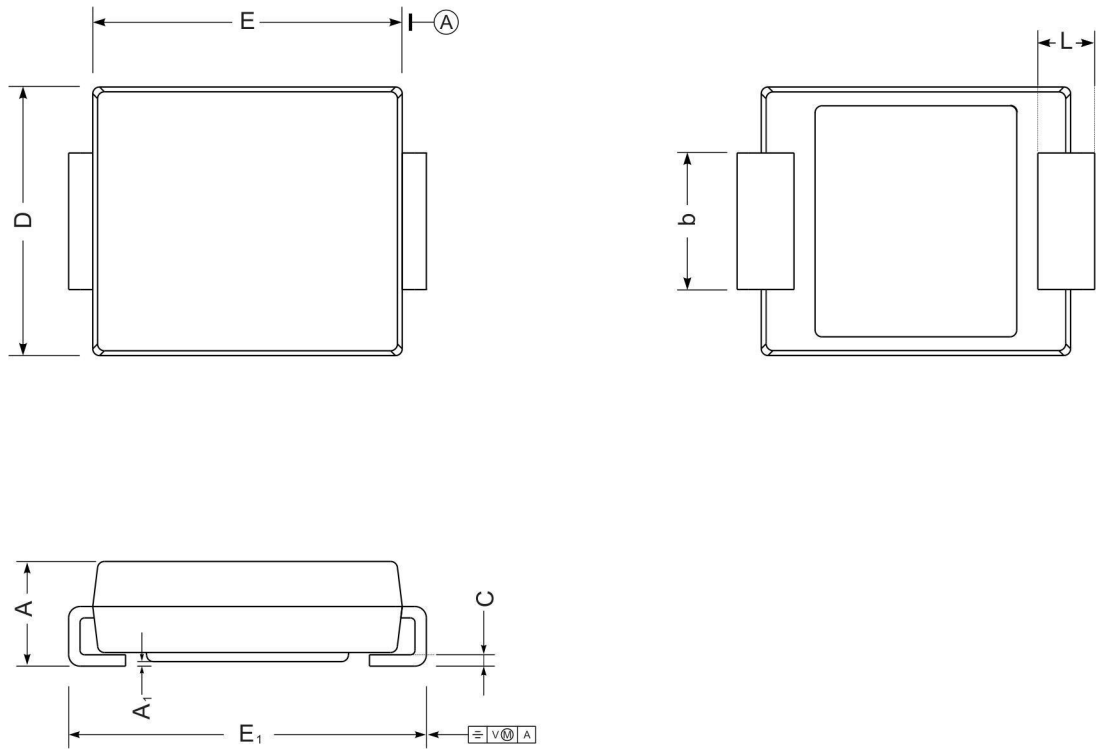
Typical Characteristic Curves



Package Outline

SMC

Dimensions in mm



UNIT		A	E	D	E ₁	A ₁	C	L	b
mm	max	2.62	7.0	6.2	8.0	0.21	0.31	1.6	3.25
	min	2.00	6.5	5.6	7.6	0.05	0.15	0.9	2.75
mil	max	103	276	244	315	8.3	12	63	128
	min	79	256	220	299	2.0	5.9	35	108