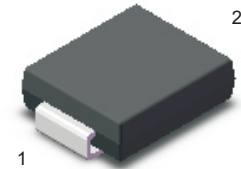


Surface Mount General Purpose Silicon Rectifiers

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives

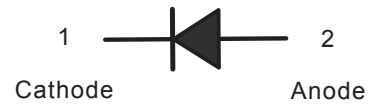
SMC



MECHANICAL DATA

- Case: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g / 0.0077oz

CIRCUIT DIAGRAM



MARKING

Type number	Marking code
S10AC	S10A
S10BC	S10B
S10DC	S10D
S10GC	S10G
S10JC	S10J
S10KC	S10K
S10MC	S10M

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	S10AC	S10BC	S10DC	S10GC	S10JC	S10KC	S10MC	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	$I_{F(AV)}$	10							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	200							A
Maximum Instantaneous Forward Voltage at 10A	V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 100							μA
Typical Junction Capacitance ⁽¹⁾	C_j	100							pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	10							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C

(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 CHARACTERISTICS

Fig.1 Forward Current Derating Curve

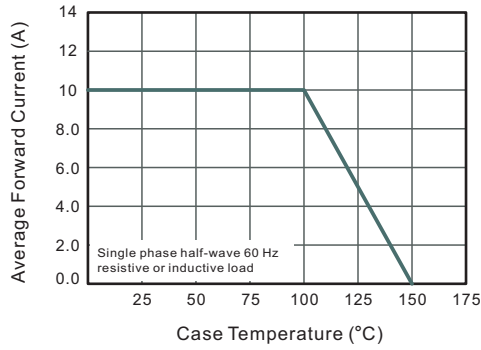


Fig.2 Typical Reverse Characteristics

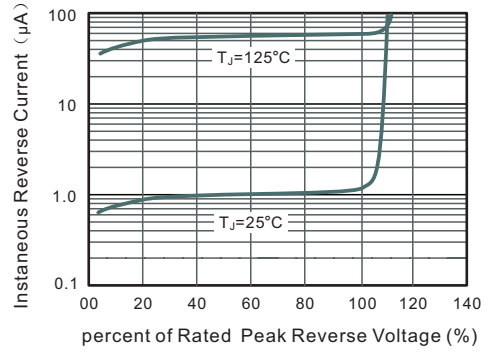


Fig.3 Typical Forward Characteristic

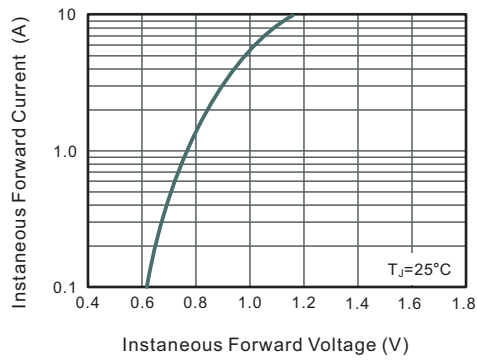


Fig.4 Typical Junction Capacitance

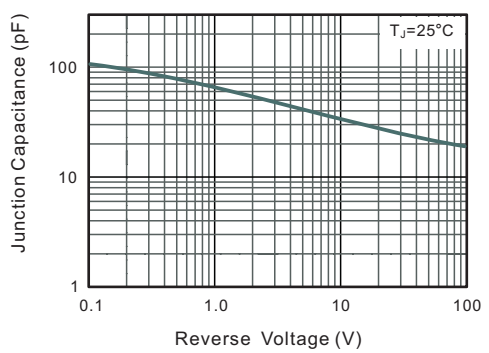
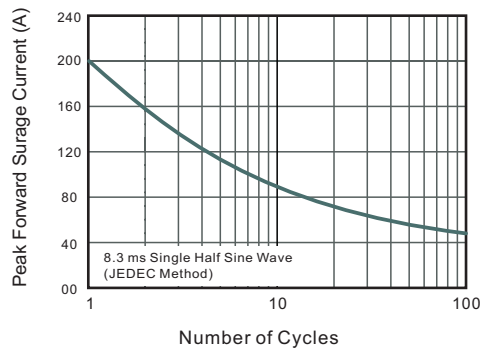
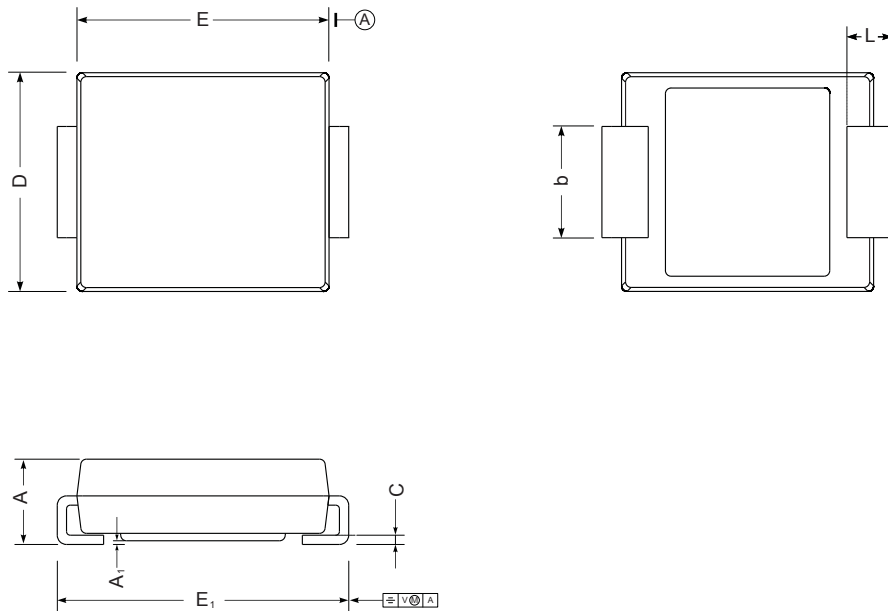


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current



SMC PACKAGE OUTLINE DRAWING



SYM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.00	2.62	0.079	0.103
E	6.6	7.1	0.260	0.280
D	5.6	6.2	0.220	0.244
E ₁	7.8	8.1	0.307	0.319
A ₁	0.05	0.21	0.002	0.0083
C	0.15	0.31	0.0059	0.012
L	1.0	1.7	0.035	0.059
b	2.75	3.25	0.108	0.128