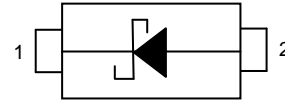


Feature

- Case:SMC
- Low I_R
- High reliability.


Applications

- Low current rectification

Construction

- Silicon epitaxial planar

Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- Pure tin plating: 7 ~ 17 um

Electrical characteristics per line@25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.85	V	$I_F=3A$
Reverse current	I_R	-	-	0.3	mA	$V_R=100V$

Absolute maximum rating@25°C

Parameter	Symbol	limits	Unit
Reverse voltage (DC)	V_{RM}	100	V
Average rectified forward current	I_o	3	A
Peak Forward Surge Current ,8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	80	A
Operating Junction temperature Range	T_j	-55 to 125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Typical Characteristics

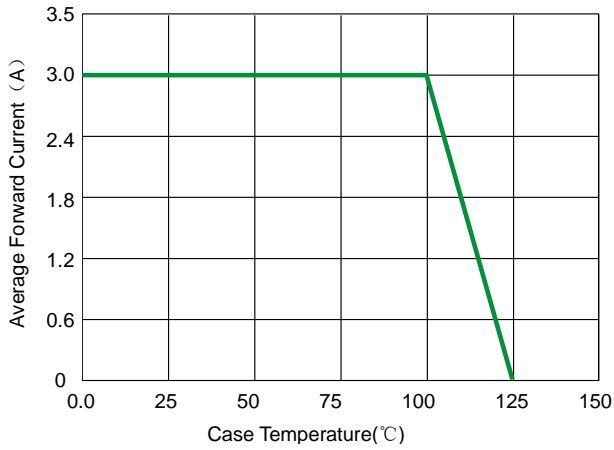


Fig.1 Forward Current Derating Curve

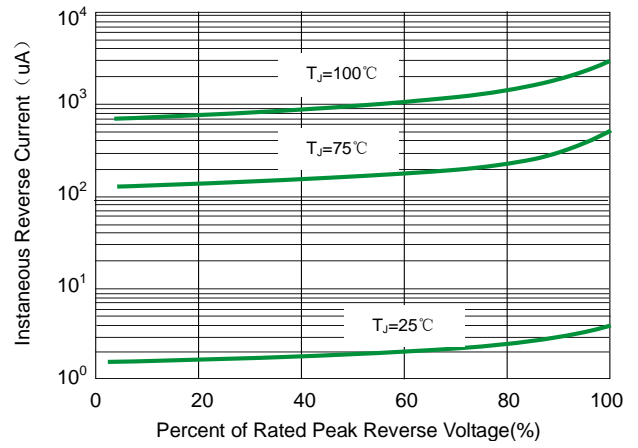


Fig.2 Typical Reverse Characteristics

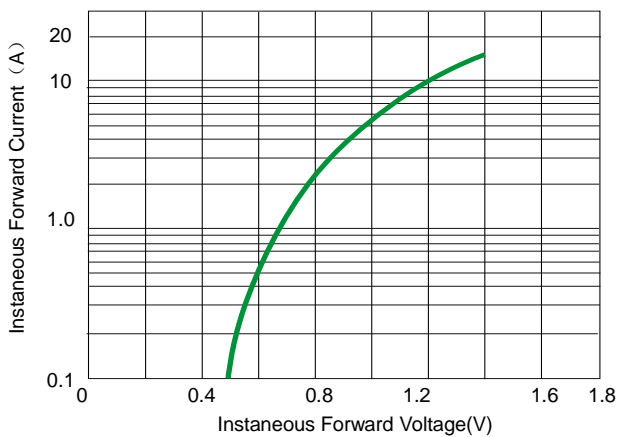


Fig.3 Typical Forward Characteristic

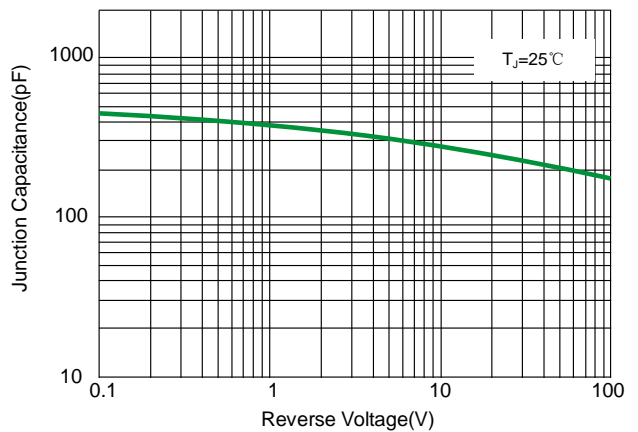


Fig.4 Typical Junction Characteristic

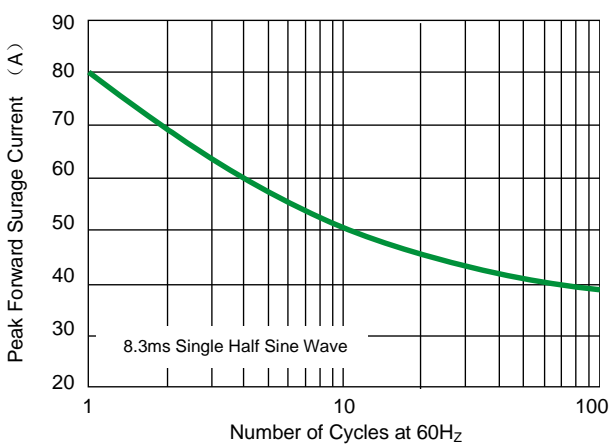


Fig 5.Maximum Non-Repetitive Peak Forward Surge Current

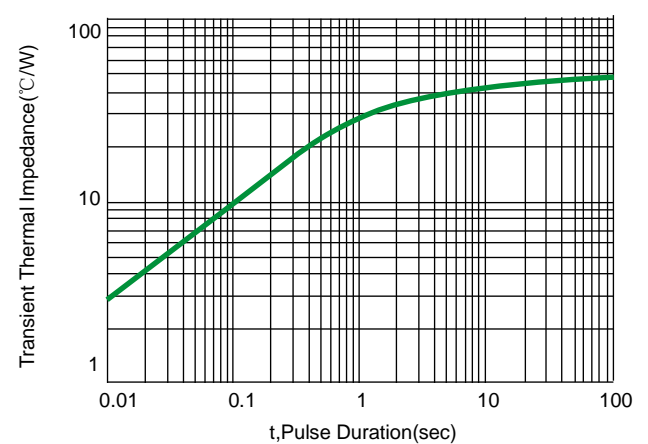
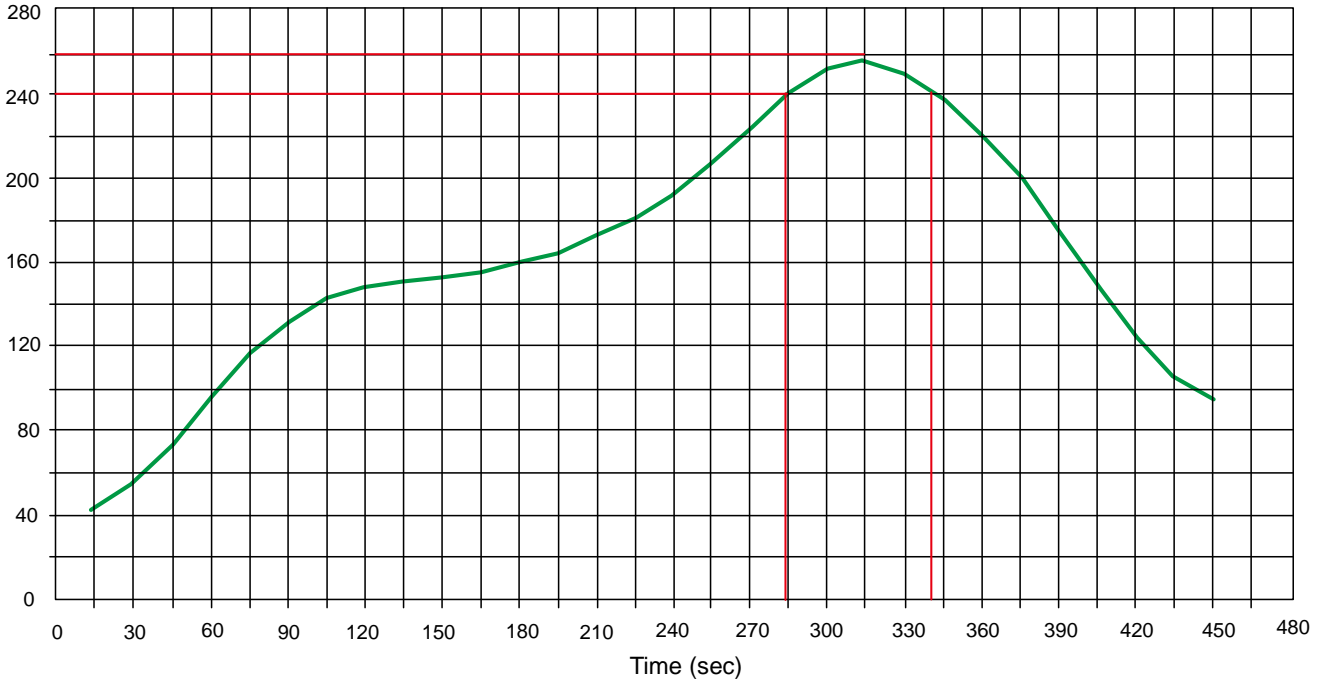


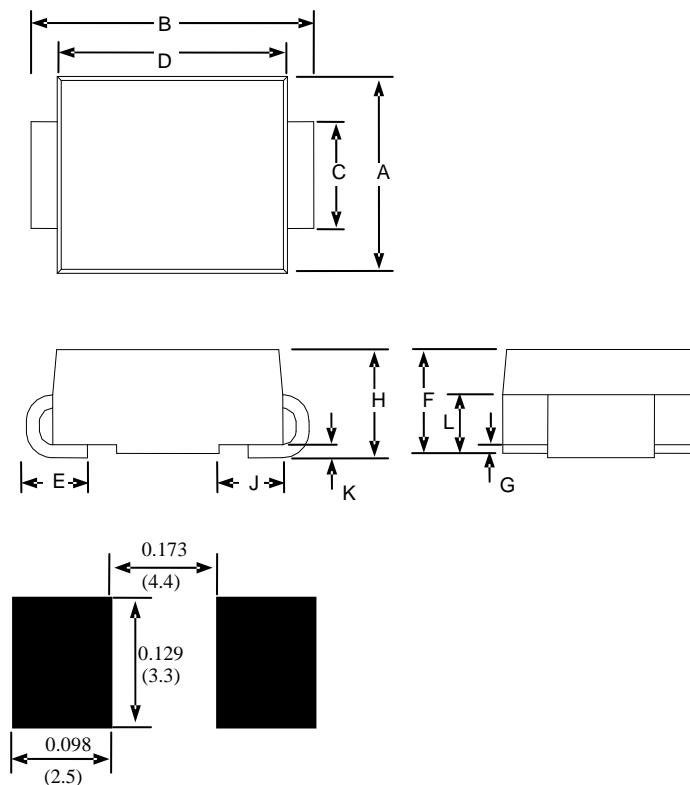
Fig 6.Typical Transient Thermal Impedance

Solder Reflow Recommendation

Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec



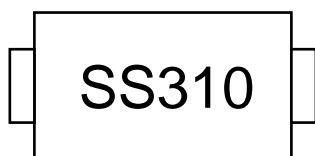
Product dimension(SMC)



DIMENSIONS ARE : $\frac{\text{INCHES}}{3}$
(Millimeters)

Dimension	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.220	0.245	5.590	6.220
B	0.305	0.320	7.750	8.130
C	0.114	0.126	2.900	3.200
D	0.260	0.280	6.600	7.110
E	0.030	0.060	0.760	1.520
F	0.079	0.103	2.060	2.620
G	-	0.008	-	0.203
H	0.079	0.103	2.060	2.620
J	0.030	0.060	0.760	1.520
K	-	0.008	-	0.203


Marking information



Ordering information

Device	Package	Reel	Shipping
PSBDC100V3	SMC(Pb-Free)	13"	3000/ Tape & Reel


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