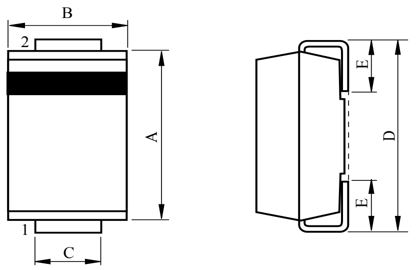
SEMICONDUCTOR
TECHNICAL DATA

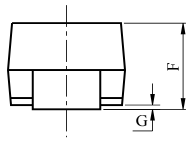
GN1G

Surface Mount Glass Passivated Rectifier

FEATURES

- Plastic package has Underwriters Laboratory flammability Classification 94V-0.
- For surface mounted aplications.
- Low profile package.
- Built-in strain relief, ideal for automated placement.
- Glass passivated chip junction.
- High temperature soldering guaranteed : 250℃/10 seconds at terminals.





Unit : mm

DIM	MILLIMETERS
A	4.3 ± 0.3
B	2.525 ± 0.12
C	1.45 ± 0.18
D	5.0 ± 0.2
E	1.15 ± 0.35
F	2.075 ± 0.175
G	0.23±0.08

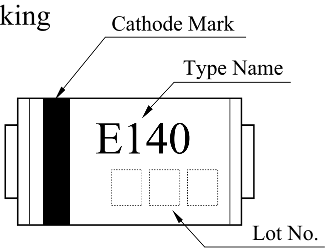
1. ANODE
2. CATHODE

SMA(1)

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive peak reverse voltage	V_{RRM}	400	V
RMS voltage	V_{RMS}	280	V
DC blocking voltage	V_{DC}	400	V
Average forward rectified current (see fig.1)	$I_{F(AV)}$	1	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T_L=110℃	I_{FSM}	40	A
Operating Junction and Storage Temperature Range	Tj, Tstg	-55~150	℃

Marking



ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
Forward voltage		V_F	I_F=1A	-	-	1.1	V
Leakage current	Ta=25℃	I_R	V_{RRM}=400V	-	-	1.0	μA
	Ta=125℃			-	-	50	
Reverse recovery time		t_{rr}	I_F=0.5A, I_R=1.0A	-	1.8	-	μS
Junction capacitance		C_J	V_R=4.0V, f=1MHz	-	12	-	pF
Thermal resistance		R_{th}(A) (Note1)	Junction to ambient	-	-	75	℃/W
		R_{th}(L)	Junction to lead	-	-	27	

Note 1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with (5.0 ×5.0mm) copper pads.

Fig.1 Forward Current Derating Curve

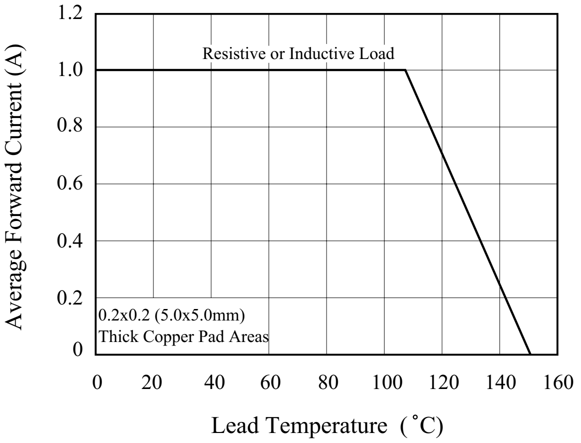


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

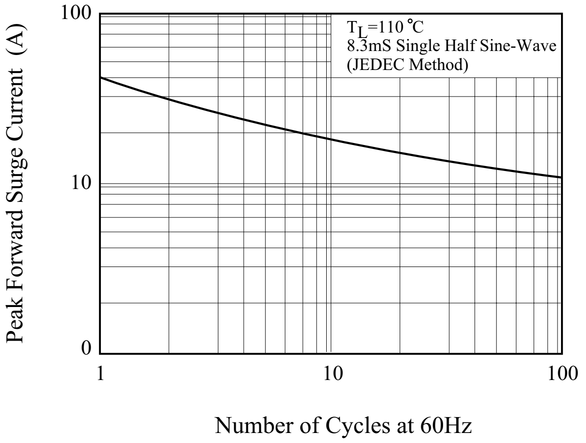


Fig.3 Typical Instantaneous Forward Characteristics

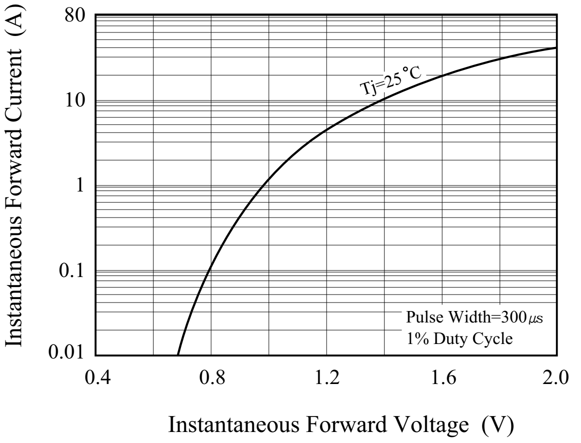


Fig.4 Typical Reverse Leakage Characteristics

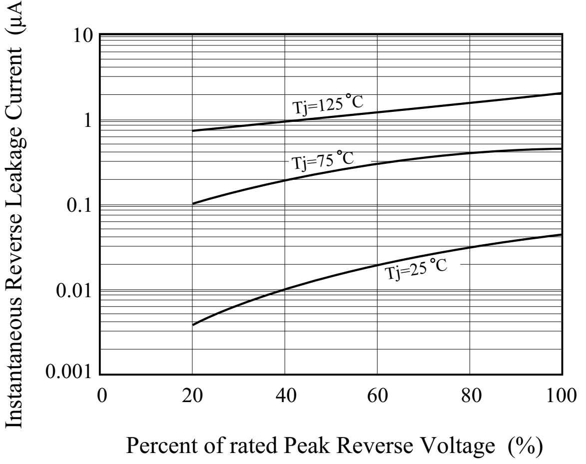


Fig.5 Typical Junction Capacitance

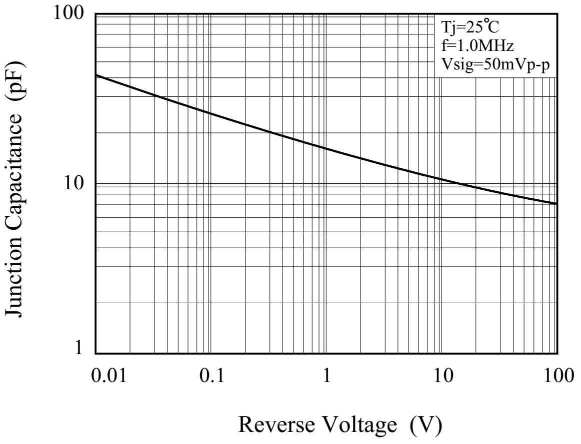


Fig.6 Transient Thermal Impedance