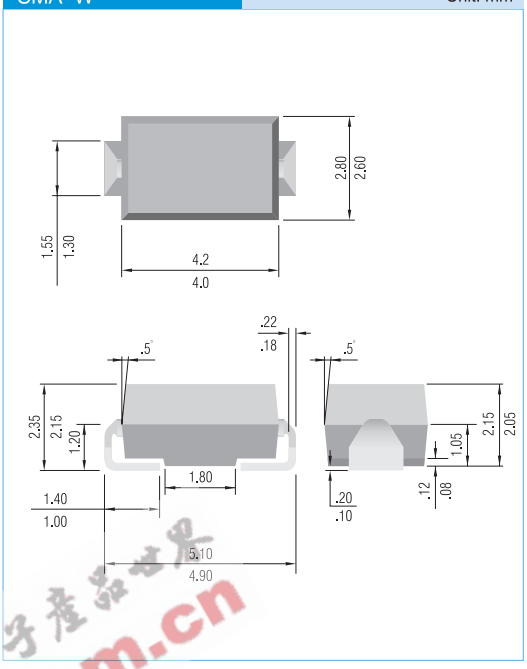
PANJIT SEMI CONDUCTOR

SS12W~S100W

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 100 Volts **CURRENT** 1.0 Ampere

SMA -W Unit: mm



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- High current capacity ,low V_F
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- Pb free product : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

- Case: SMA-W molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750D, Method 1036.3
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.002 ounce, 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.

PARAMETER	SYMBOL	SS12W	SS13W	SS14W	SS15W	SS16W	SS18W	S100W	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Current .375"(9.5mm) lead length at T_L=75°C	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A (Note 1)	V_F	0.5			0.7		0.85		V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltage T_J=100°C	I_R	0.5 50					0.5 20		mA
Maximum Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	28 88							°C / W
Operating Junction Temperature Range	T_J	-55 to +125							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

NOTES:
A.Pulse Test with PW =300μsec, 1% Duty Cycle.
B.Mounted on P.C. Board with 5.0mm^2 (.013mm thick) copper pad areas.

SS12W~S100W

RATING AND CHARACTERISTIC CURVES

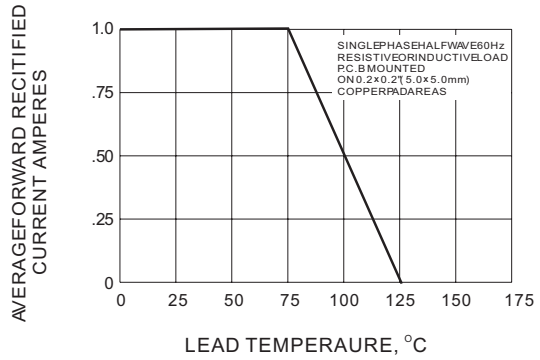


Fig.1- FORWARD CURRENT DERATING CURVE

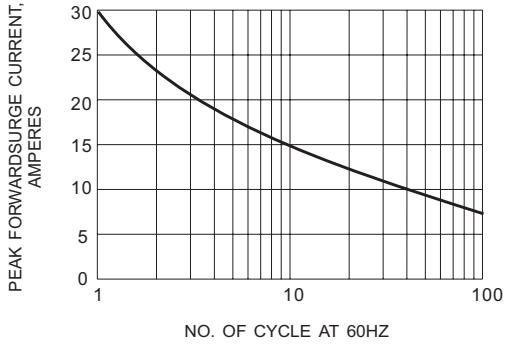


Fig.2-MAXIMUMNON-REPETITIVEPEAK FORWARD SURGE CURRENT

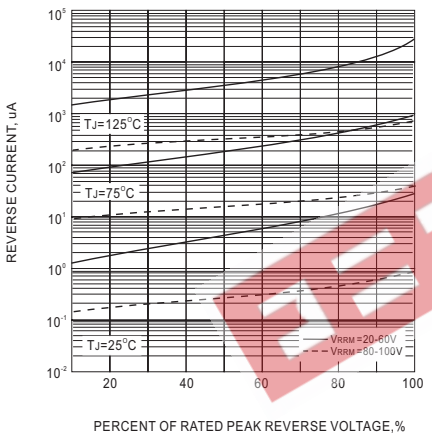


Fig.3- TYPICAL REVERSE CHARACTERISTIC

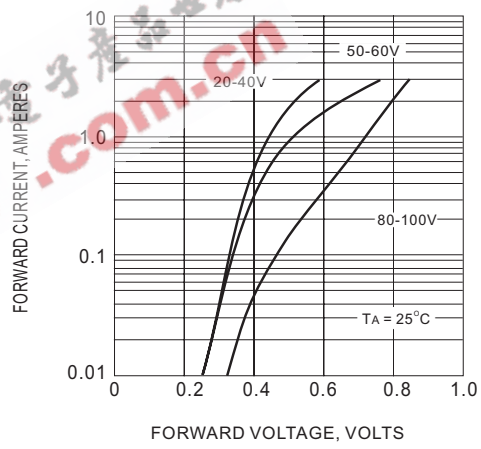


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

LEGAL STATEMENT