



SS5817---SS5819

SCHOTTKY BARRIER RECTIFIER

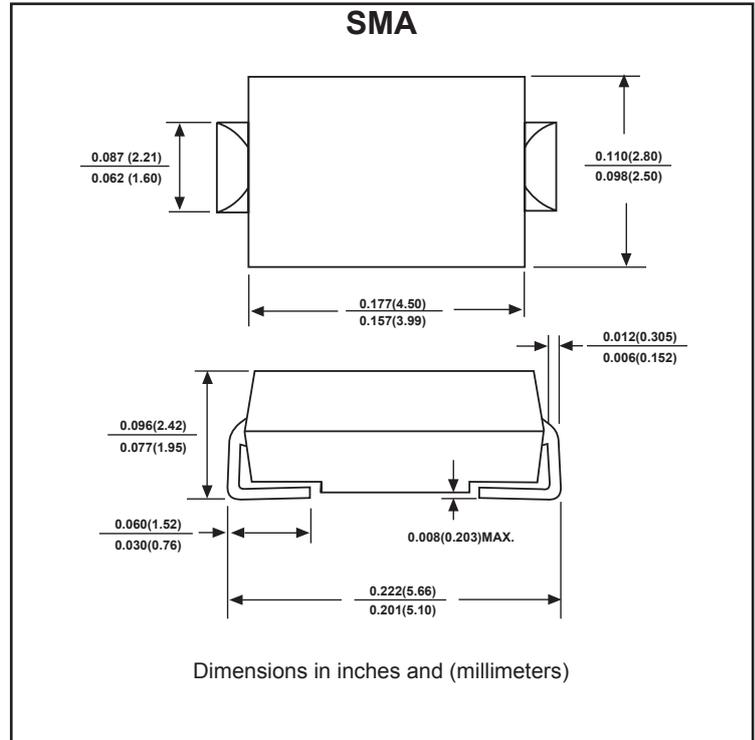
VOLTAGE RANGE: 20--- 40 V CURRENT: 1.0 A

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- For surface mounted applications
- Metal silicon junction ,majority carrier conduction
- Low power loss ,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: SMA molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

TYPE NUMBER	SYMBOL	SS5817	SS5818	SS5819	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	V
Maximum RMS voltage	V_{RMS}	14	21	28	V
Maximum DC blocking voltage	V_{DC}	20	30	40	V
Maximum Average Forward rectified Current 0.375" (9.5mm) lead length	$I_{F(AV)}$	1.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	25.0			A
Maximum instantaneous forward voltage at 1.0 A (Note 1)	V_F	0.45	0.55		V
Maximum reverse current at rated DC blocking voltage per diode	@ $T_A=25^\circ C$	1.0			mA
	@ $T_A=100^\circ C$	10.0			
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50			°C/W
Typical junction capacitance (Note 3)	C_j	110			pF
Storage Temperature	T_{STG}	- 56 ---- + 150			°C
Operation Junction Temperature	T_j	- 55 ---- + 125			°C

NOTE: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

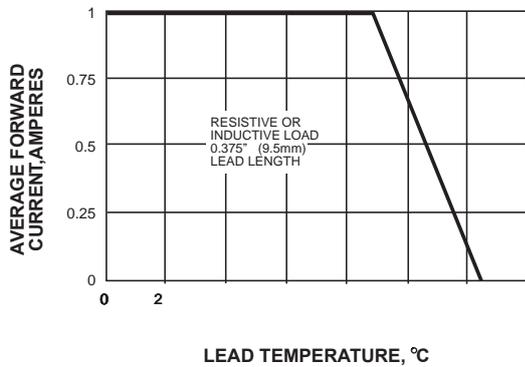


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

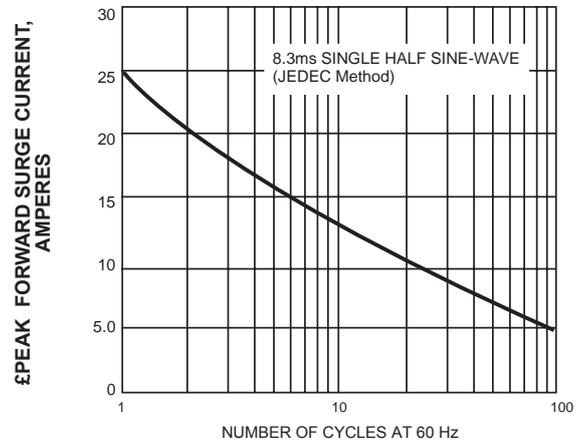


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

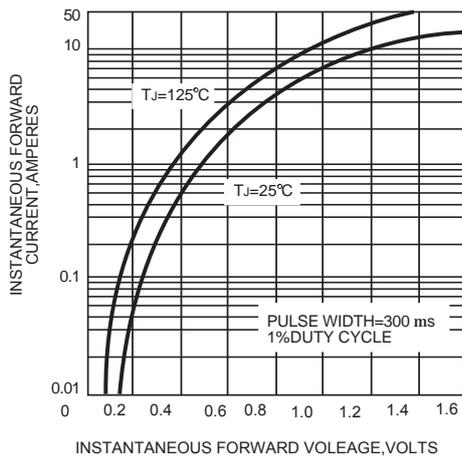


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

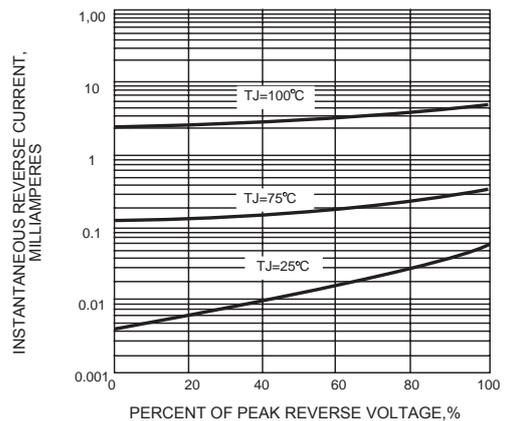


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

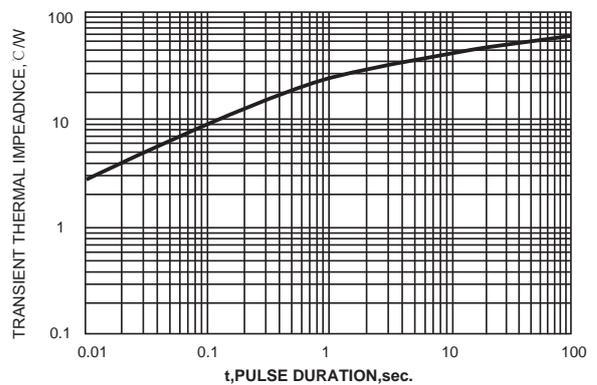


FIG. 5-TYPICAL JUNCTION CAPACITANCE

