

SCHOTTKY BARRIER RECTIFIER

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

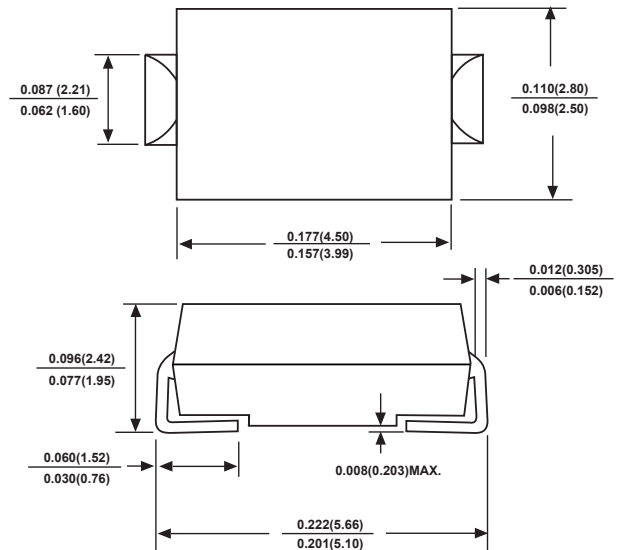
FEATURES

- 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

SMA



Dimensions in inches and (millimeters)

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 Current0.375"(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(Note1)		V _F	0.45	0.55		V
Maximum reverse current at rated DC blocking voltage per diode	@T _A =25℃	I _R	1.0			mA
	@T _A =100℃		10.0			
Typical Thermal Resistance (Note 2)		R _{θJA}	50			℃/W
Typical junction capacitance(Note 3)		C _j	110			pF
Storage Temperature		T _{STG}	- 56 ---- + 150			℃
Operation Junction Temperature		T _i	- 55 ---- + 125			℃

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

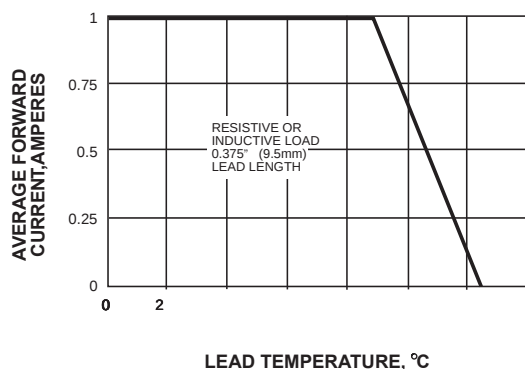


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

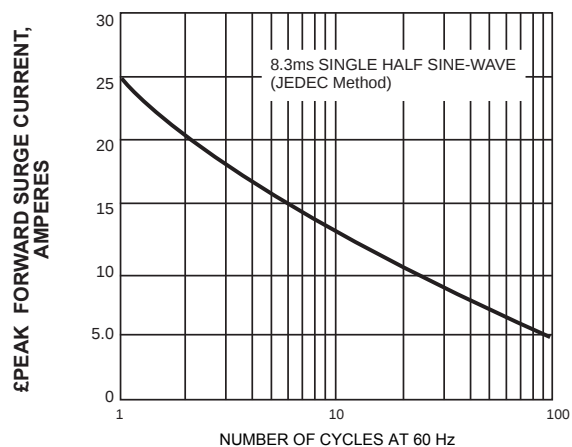


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

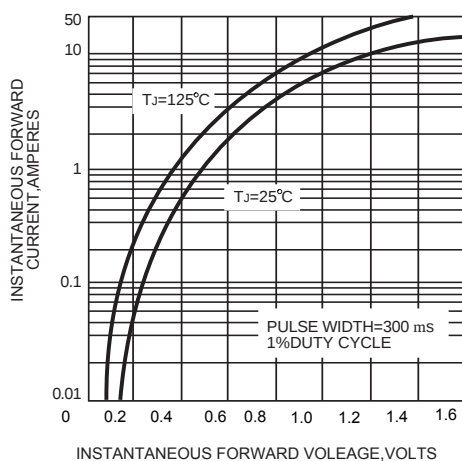


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

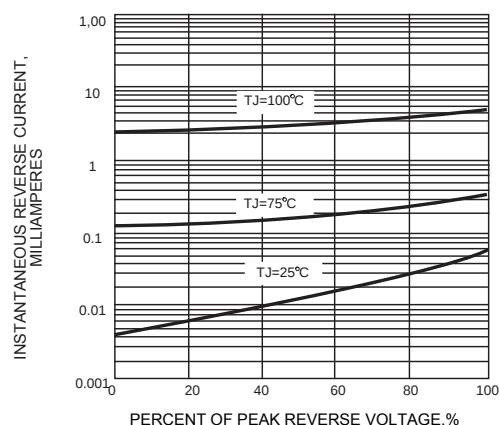


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

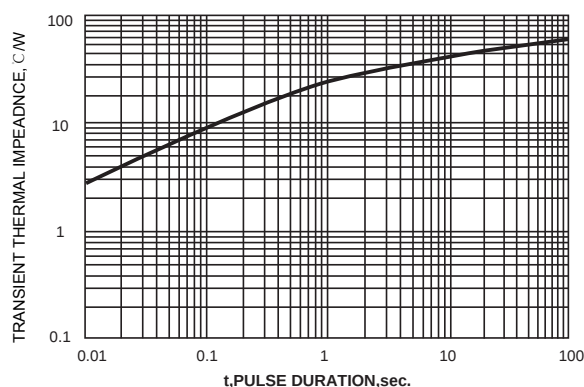


FIG. 5-TYPICAL JUNCTION CAPACITANCE

