

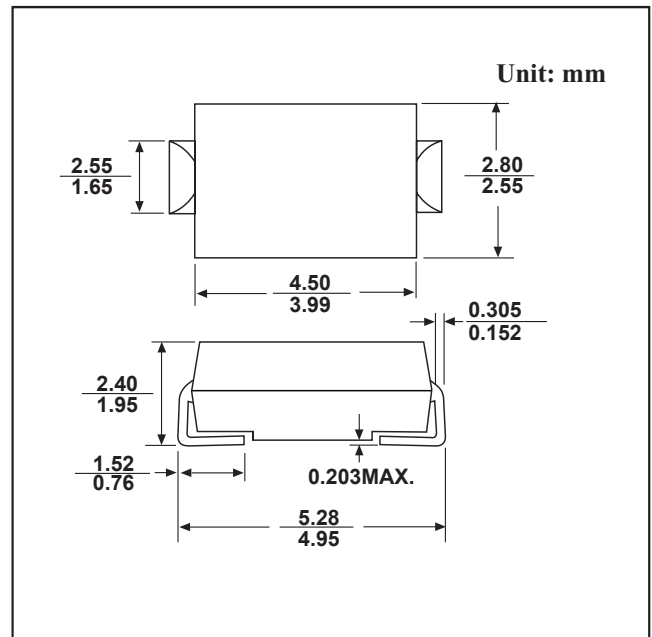
SMA Schottky Barrier Rectifiers

FEATURES

- The plastic package carries Underwriters
- Laboratory Flammability Classification 94V-0
- 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: 250°C / 10
seconds at terminals

MECHANICAL DATA

- Case: SMA(DO-214AC) molded plastic body
- Terminals: leads solderable per MIL-STD-750,
Method 2026
- Polarity: Color band denotes cathode end Mounting
Position: Any
- Weight: 0.003 ounce, 0.093 grams



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

	SYMBOLS	SS5817	SS5818	SS5819	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	VOLTS
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_L=90^\circ C$	$I_{(AV)}$	1.0			Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25.0			Amps
Maximum instantaneous forward voltage at 1.0A	V_F	0.450	0.550		Volts
Maximum DC reverse current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R	1.0 10.0			mA
Typical junction capacitance (NOTE 1)	C_J	110.0			pF
Typical thermal resistance (NOTE 2)	R_{qJA}	50.0			$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +125			$^\circ C$

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

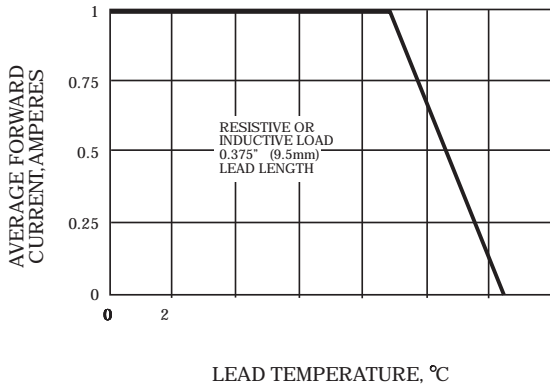


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

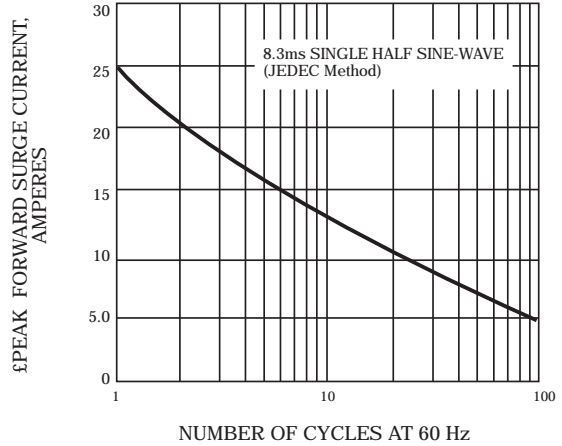


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

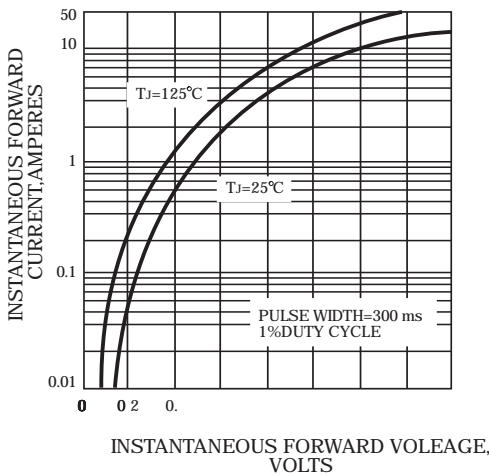


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

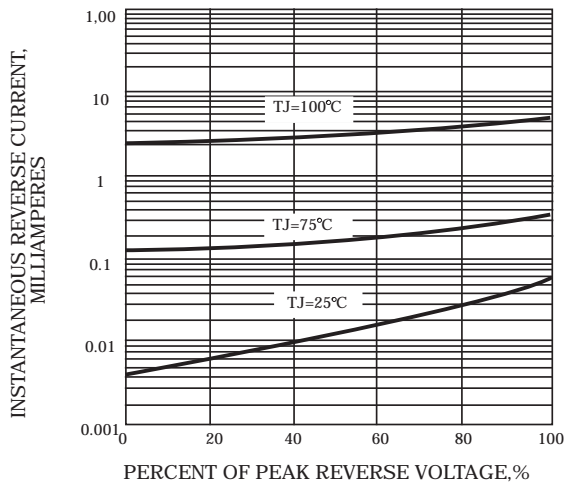


FIG. 5-TYPICAL JUNCTION CAPACITANCE

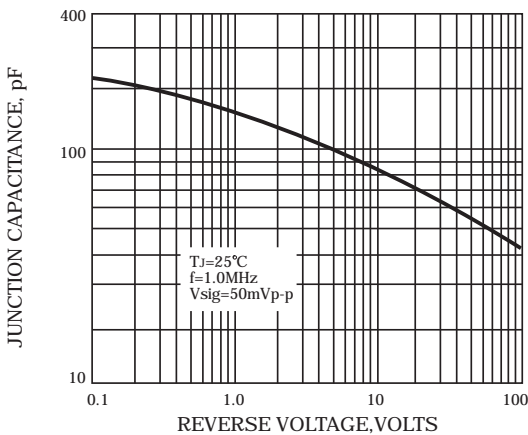


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

