

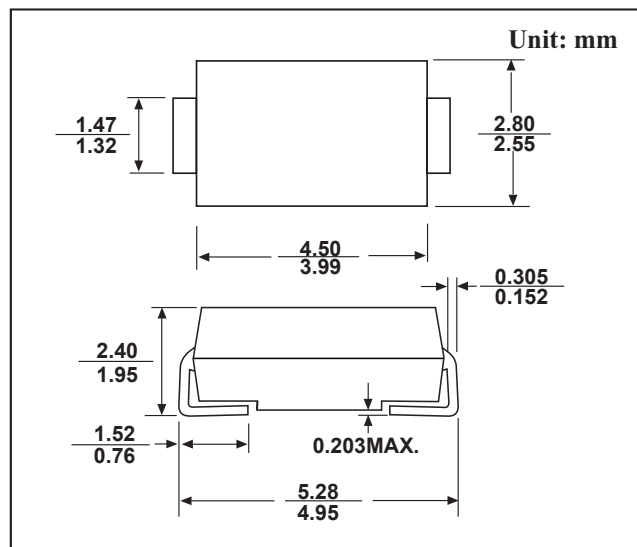
SMA PLASTIC SILICON RECTIFIERS

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: SMA molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Characteristic		SYMBOLS	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNITS
Maximum recurrent peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum DC blocking voltage		V_{DC}								
Maximum RMS Voltage		$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average rectified output current(Note 1)@TA=75℃		$I_{(AV)}$	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDECmethod)		I_{FSM}	30.0							A
Maximum instantaneous forward voltage at 1.0A		V_F	1.0							V
Maximum DC reverse current at rated DC blocking voltage	@TA=25℃	I_{RM}	5.0							μA
	@TA=100℃		50.0							
Typical Junction Capacitance(Note 1)		C_J	15							pF
Typical thermal resistance (NOTE 2)		$R_{\theta JA}$	85							℃/W
Operating junction and storage temperature range		T_j	-55 to+150							℃

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

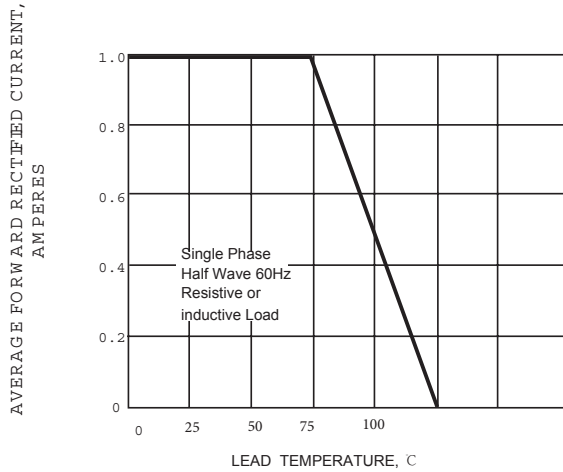


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

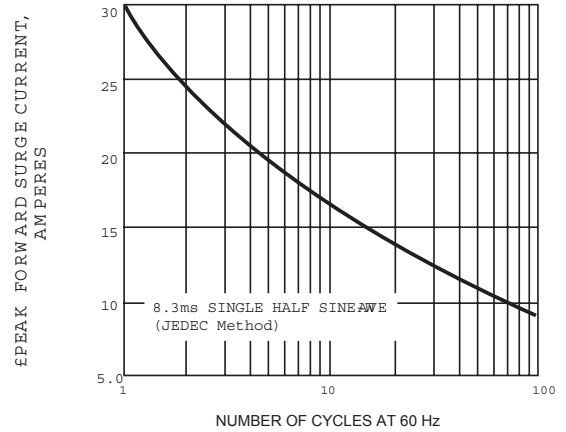


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

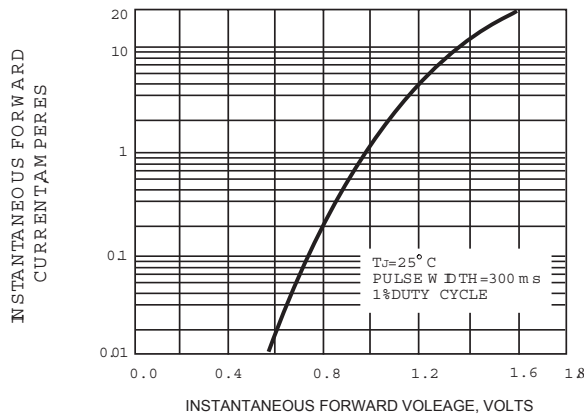


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

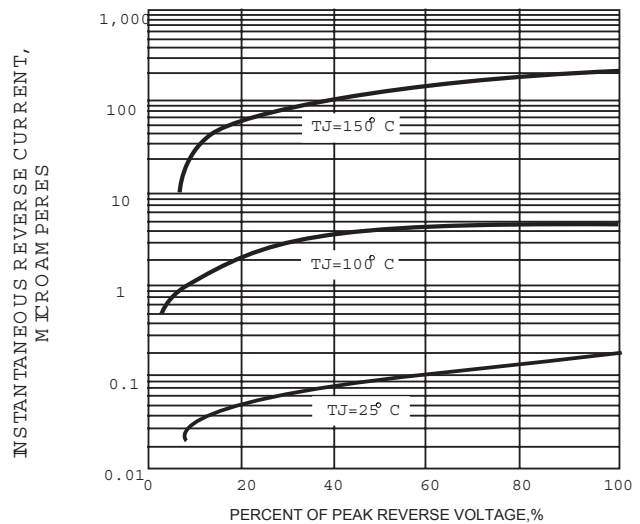


FIG. 5-TYPICAL JUNCTION CAPACITANCE

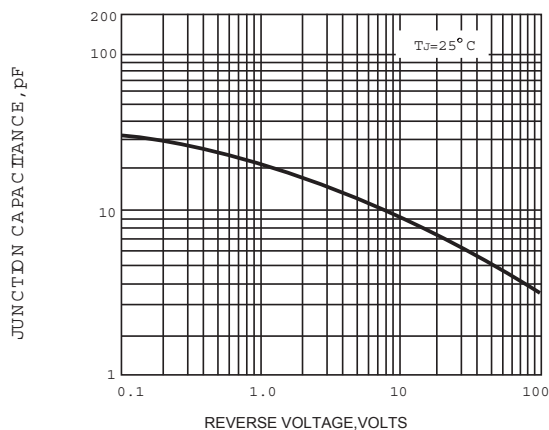


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

