

PLASTIC SILICON RECTIFIERS

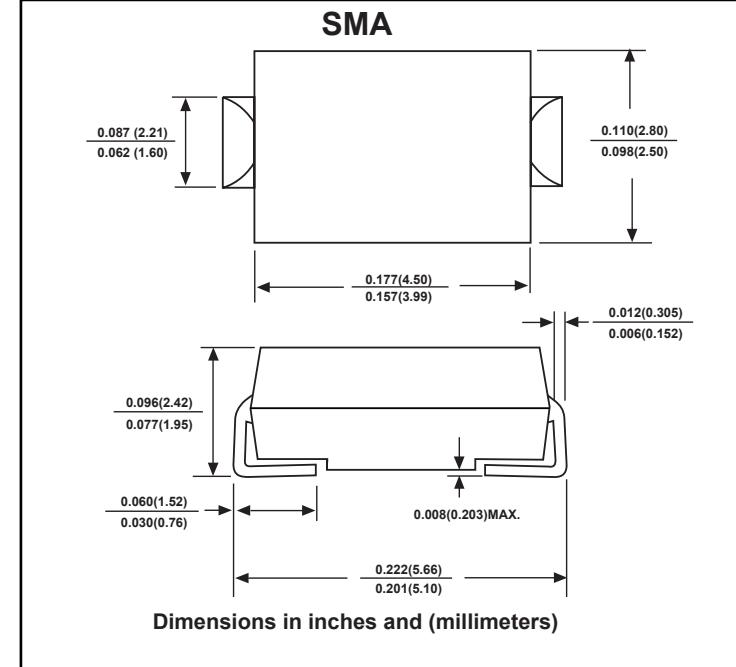
VOLTAGE RANGE: 50 --- 1000 V CURRENT: 2.0 A

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique For surface mounted applications
- Built-in strain relief, ideal for automated placement
- High temperature soldering guaranteed: 260°C/10 seconds at
- 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%.

Characteristic	SYMBOLS	S2A	S2B	S2D	S2G	S2J	S2K	S2M	UNITS
Maximum repetitive 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
Maximum average forward rectified current at TL=110°C	$I_{(AV)}$					2.0			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}					60.0			A
Maximum instantaneous forward voltage at 1.0A	V_F				1.0				V
Maximum DC reverse current	I_{RM}	@TA=25			5.0				
at rated DC blocking voltage			@TA=100		50.0				μA
Typical junction capacitance (NOTE 1)	C_J				30				pF
Typical thermal resistance (NOTE 2)	$R_{θJA}$				50				°C/W
Operating junction and storage temperature range	T_j				-65 to +150				°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4.0V DC.

2. P.C.B. mounted with 0.4x0.4"(10x10mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

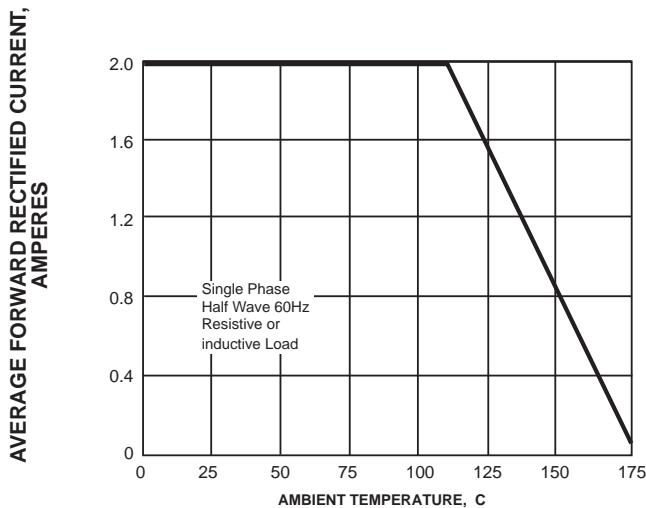


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

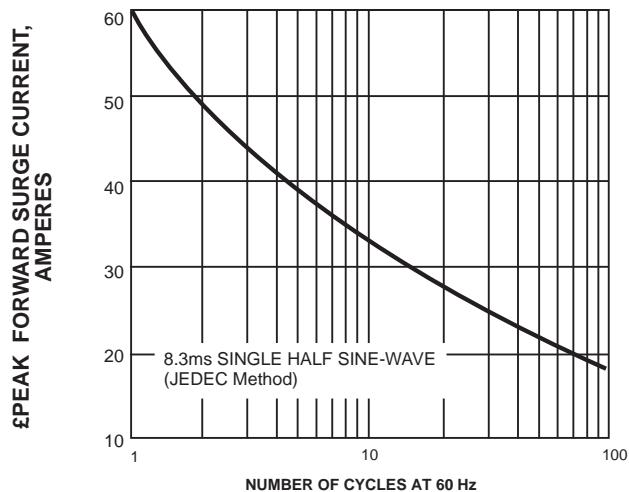


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

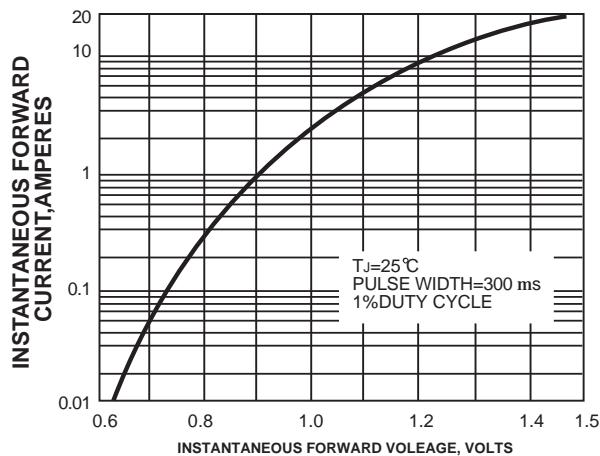


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

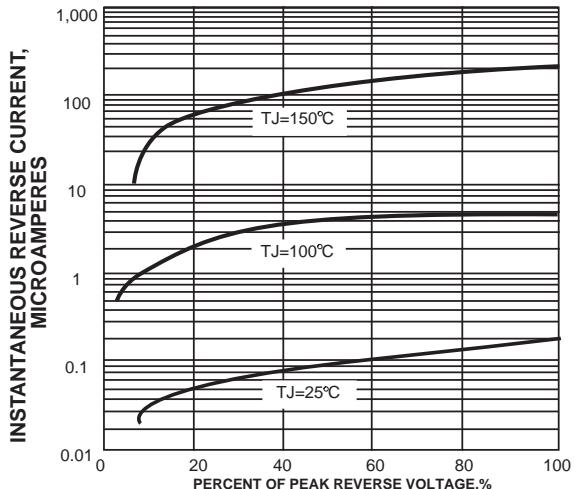
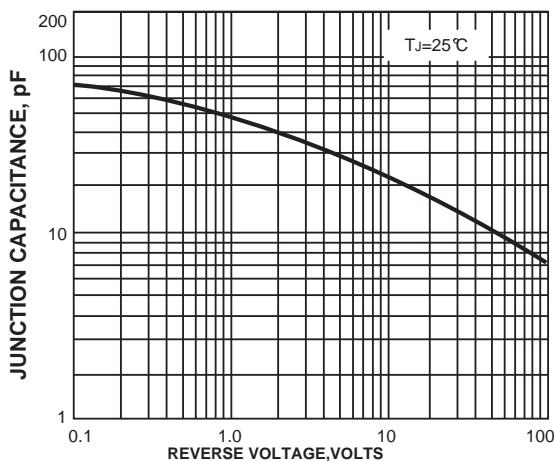


FIG. 5-TYPICAL JUNCTION CAPACITANCE



F1G.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

