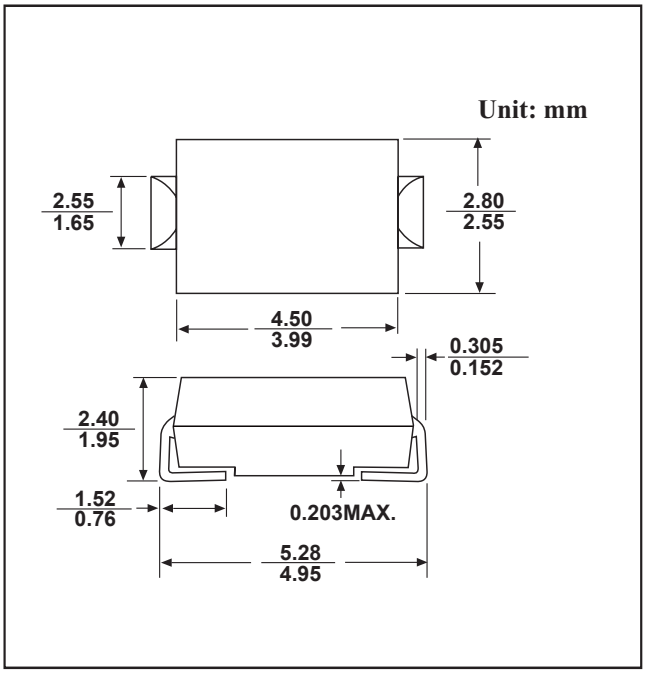
SMA PLASTIC SILICON RECTIFIERS

FEATURES

- The plastic package carries Underwrites 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℃/10 seconds at Terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

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)

Characteristic		SYMBOLS	M1	M2	M3	M4	M5	M6	M7	UNITS
Maximum recurrent peak reverse voltage Maximum DC blocking voltage		V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average rectified output current(Note 1)@TA=75℃		$I_{O(AV)}$	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
Forward Voltage @IF=10A		V_F	1.1							V
Peak Reverse Current at rated DC blocking voltage	@T_A=25	I_{RM}	5.0							μA
	@T_A=100		50.0							
Typical Junction Capacitance(Note 1)		C_J	15							pF
Typical Thermal Resistance Junction to Ambient (Note 2)		$R_{\theta JA}$	30							℃/W
Operating Temperature Range		T_j	-55 to+150							℃

NOTES:

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

2.Thermal Resistance from Junction to Ambient.375"(9.5mm) lead length.

RATINGS AND CHARACTERISTIC CURVES

FIG.1: FORWARD CURRENT DERATING CURVE

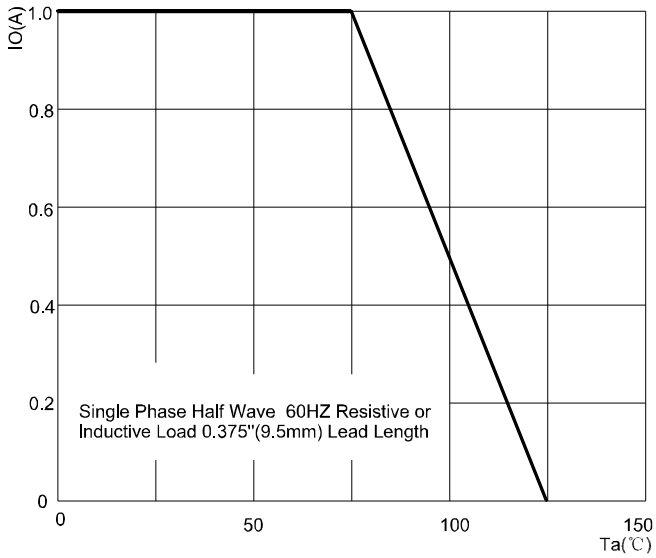


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

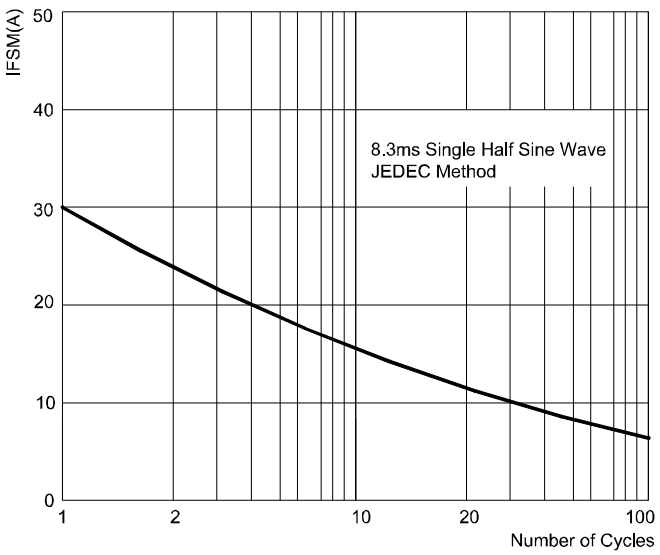


FIG.3: TYPICAL FORWARD CHARACTERISTICS

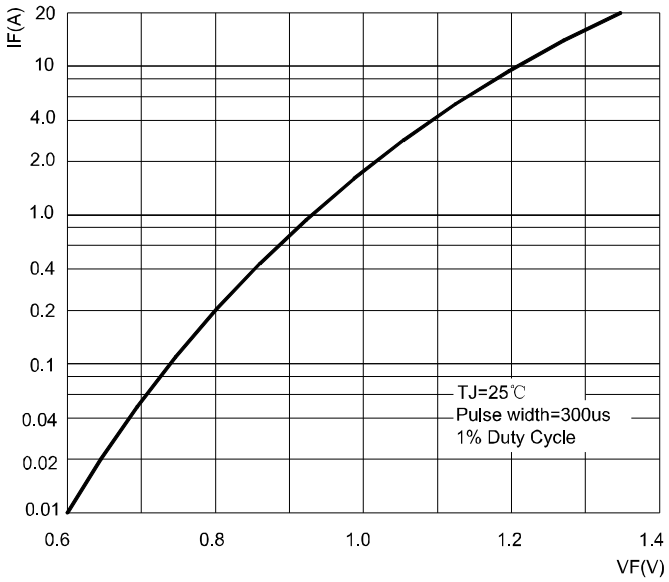


FIG.4:TYPICAL REVERSE CHARACTERISTICS