

PLASTIC SILICON RECTIFIERS

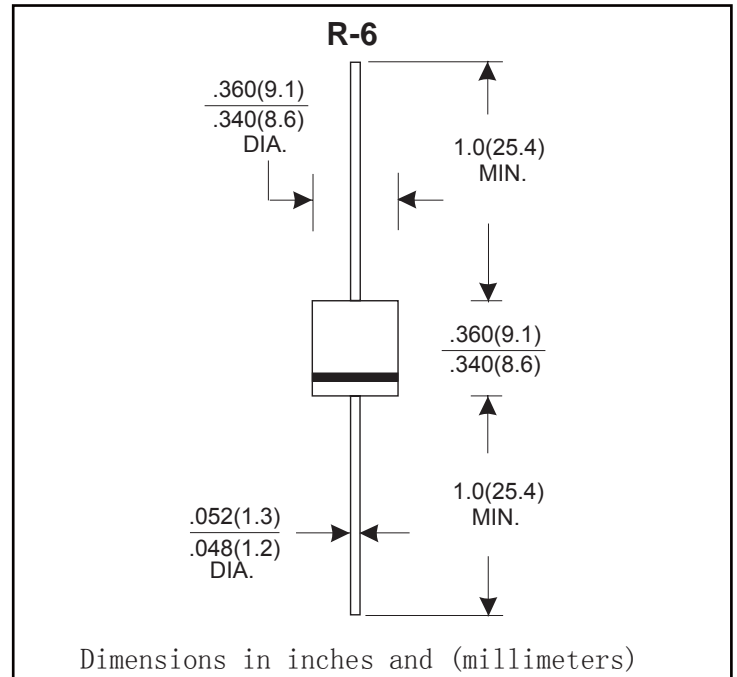
VOLTAGE RANGE: 50 --- 1000 V CURRENT: 10.0 A

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Diffused Junction
- High forward current capability
- High surge current capability
- Construction utilizes void-free molded plastic technique
- 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:R-6 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	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}								
Working peak reverse voltage	V_{RMS}	50	100	200	400	600	800	1000	V
DC blocking voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average rectified output current(Note 1)@TA=50°C	$I_{O(AV)}$	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDECmethod)	I_{FSM}	600.0							A
Forward Voltage @IF=10A	V_F	1.0							V
Peak Reverse Current at rated DC blocking voltage	@TA=25	10.0							μA
	@TA=100	100.0							
Typical Junction Capacitance(Note 2)	C_J	150			80				pF
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	10							°C/W
Operating Temperature Range	T_j	-50 to +150							°C
Storage Temperature Range	T_{STG}								

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-TYPICAL FORWARD CHARACTERISTICS

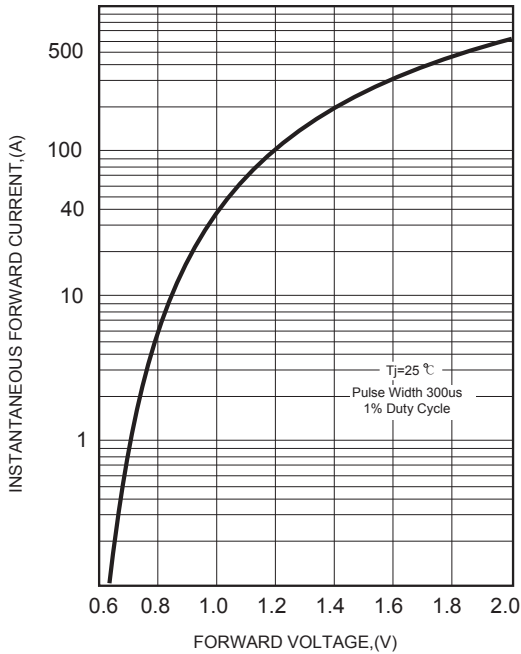


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

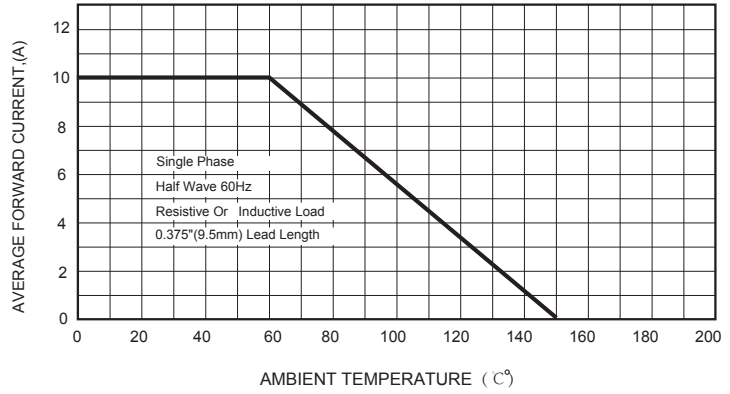


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

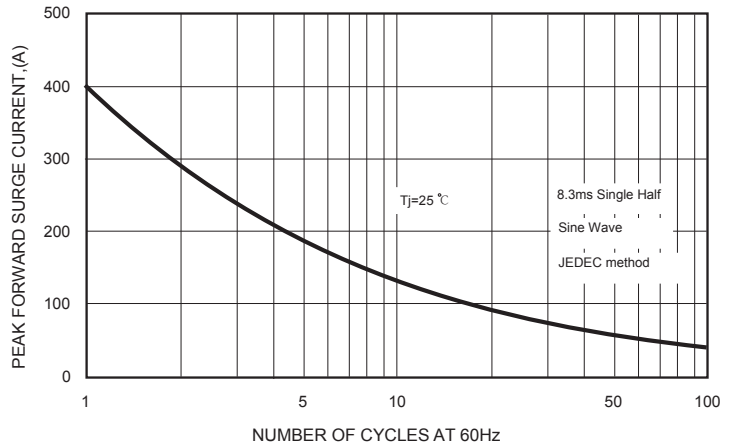


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

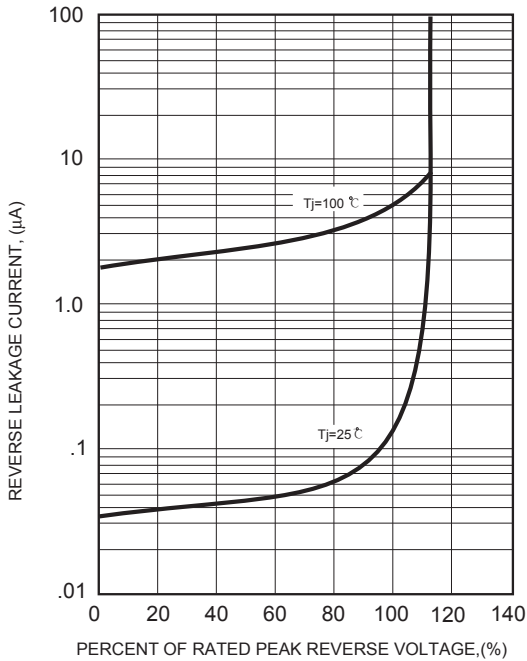


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH

