

PLASTIC SILICON RECTIFIERS

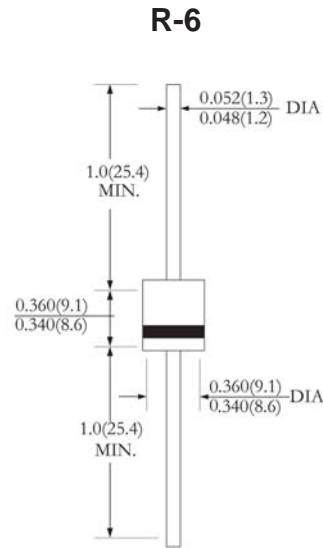
VOLTAGE RANGE: 50 --- 1000 V CURRENT: 6.0 A

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- 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



Dimensions in inches and (millimeters)

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%.

		6A05	6A1	6A2	6A3	6A4	6A6	6A8	6A10	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current 0.375"(9.5mm) lead length $T_A=60^\circ\text{C}$	$I_{F(AV)}$	6.0								A
Peak forward surge current (8.3ms half Sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250.0								A
Maximum instantaneous forward voltage @6.0 A	V_F	1.0								V
Maximum reverse current at rated DC blocking voltage	@ $T_A=25$	10.0								μA
	@ $T_A=100$	400.0								
Typical junction capacitance (Note1)	C_J	15								pF
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm)Lead Length @ $T_A=75^\circ\text{C}$	HIIR	5.0								A
Typical thermal resistance(Note2)	$R_{\theta JA}$	35								$^\circ\text{C/W}$
Operating junction temperature range	T_J	-65 to +150								$^\circ\text{C}$
	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-FORWARD CURRENT DERATING CURVE

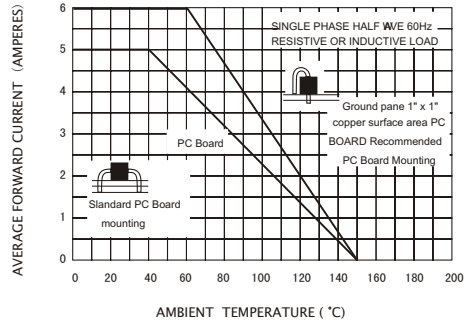


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

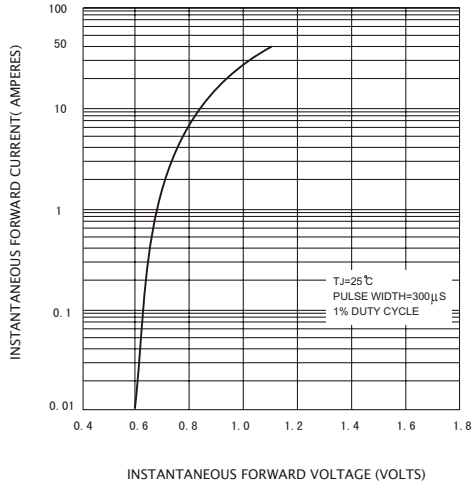


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

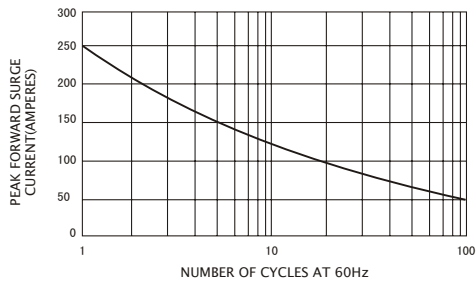


FIG.4-TYPICAL REVERSE CHARACTERISTICS

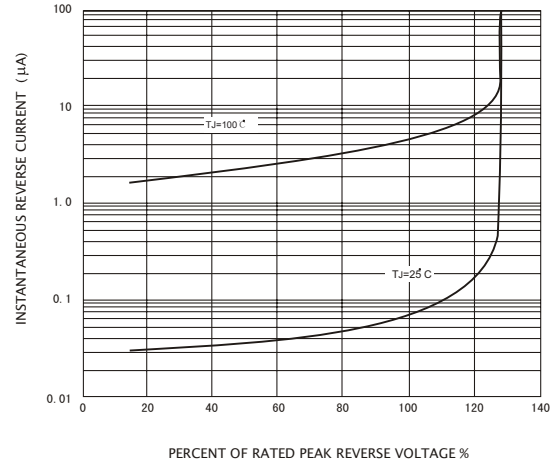


FIG.5-TYPICAL JUNCTION CAPACITANCE

