

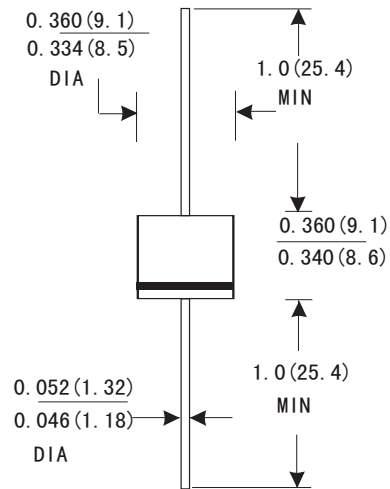
## R-6 PLASTIC SILICON RECTIFIERS

### 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 2015/863 and WEEE 2012/19/EU

### 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)

Parameter	Symbol	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	$I_R$	@ $T_A=25^\circ\text{C}$	10.0								$\mu\text{A}$
		@ $T_A=100^\circ\text{C}$	400.0								
Typical junction capacitance (Note1)	$C_J$	150								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)	$R_{\theta JA}$	10								$^\circ\text{C/W}$	
Operating junction temperature range	$T_J$	-55 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

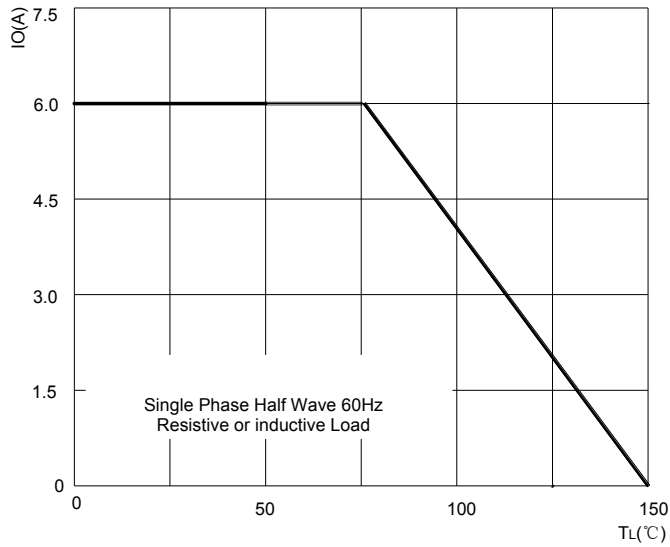


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

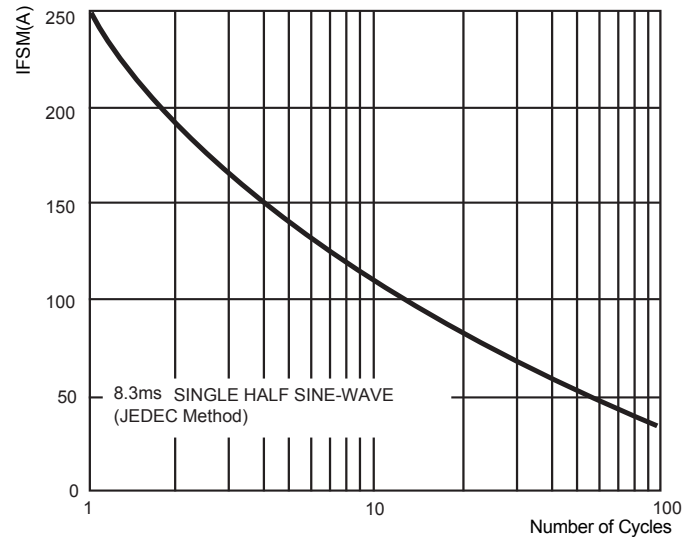


FIG.3: TYPICAL FORWARD CHARACTERISTICS

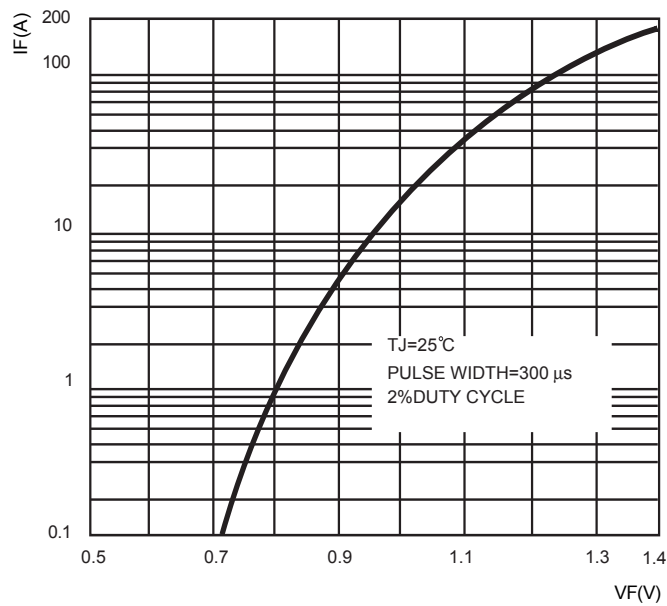


FIG.4: TYPICAL REVERSE CHARACTERISTICS

