

**FEATURES**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

**MECHANICAL DATA**

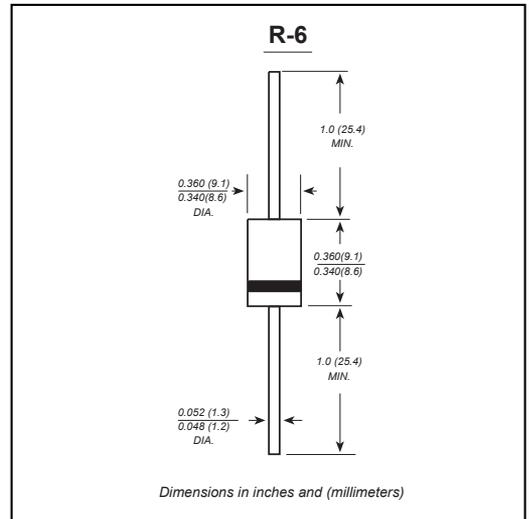
**Case:** R-6 molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.072 ounce, 2.05 grams


**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

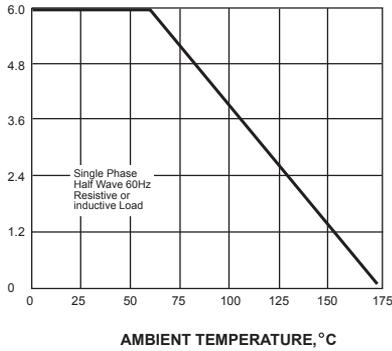
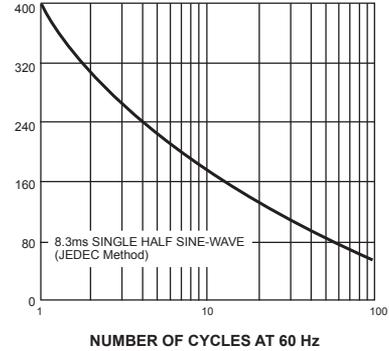
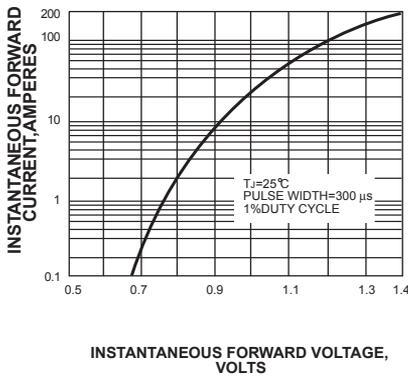
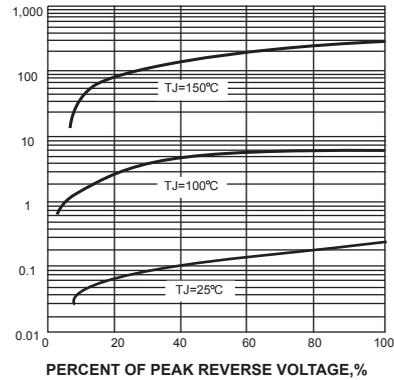
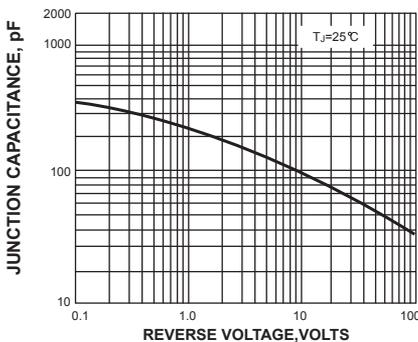
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	6A05G	6A1G	6A2G	6A4G	6A6G	6A8G	6A10G	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=60^\circ\text{C}$	$I_{(AV)}$	6.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	300							Amps
Maximum instantaneous forward voltage at 6.0A	$V_F$	0.95							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	10.0 400							$\mu\text{A}$
Typical junction capacitance (NOTE 1)	$C_J$	150							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-65 to +175							$^\circ\text{C}$

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

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

**GLASS PASSIVATED SILICON RECTIFIER**
**AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES**
**FIG. 1- FORWARD CURRENT DERATING CURVE**

**PEAK FORWARD SURGE CURRENT,  
AMPERES**
**FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD  
SURGE CURRENT**

**FIG. 3- TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTICS**

**INSTANTANEOUS REVERSE CURRENT,  
MICROAMPERES**
**FIG. 4- TYPICAL REVERSE CHARACTERISTICS**

**FIG. 5- TYPICAL JUNCTION CAPACITANCE**

**TRANSIENT THERMAL IMPEDANCE,  
°C/W**
**FIG. 6- TYPICAL TRANSIENT THERMAL IMPEDANCE**
