

6.0Amp General Purpose Rectifiers

6A05 ~ 6A10

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Open-Junction chip ,silastic passivated
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals

Mechanical Data

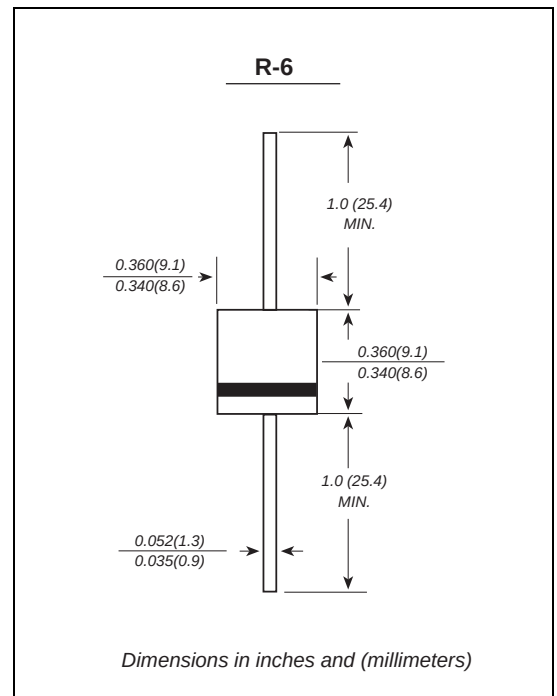
Case: JEDEC R-6 molded plastic body

Terminals: Solder plated, 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	6A05	6A1	6A2	6A3	6A4	6A6	6A8	6A10	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L=60^\circ\text{C}$	$I_{(AV)}$	6.0								Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400								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	10.0 100.0								μA
Typical junction capacitance (Note 2)	C_J	150								pF
Typical thermal resistance (Note 3)	R_{qJA}	10								$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +155								$^\circ\text{C}$

Note: 1.Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

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

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

Ratings And Characteristic Curves

6A05 THRU 6A10

FIG. 1- FORWARD CURRENT DERATING CURVE

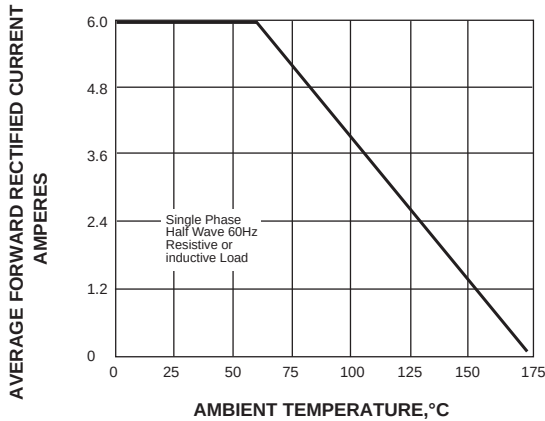


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

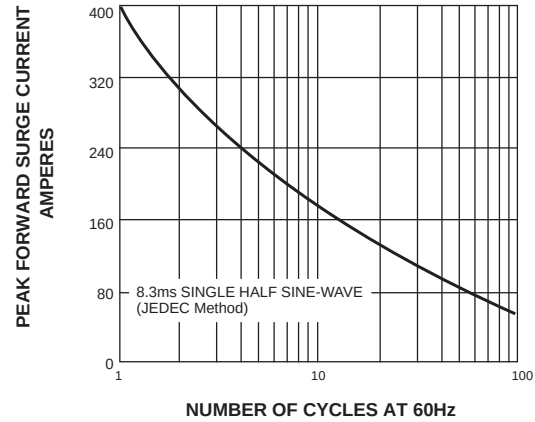


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

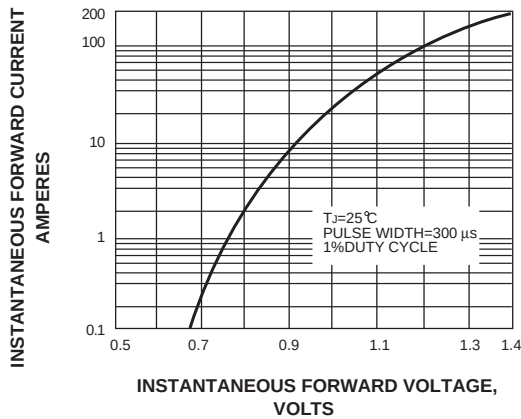


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

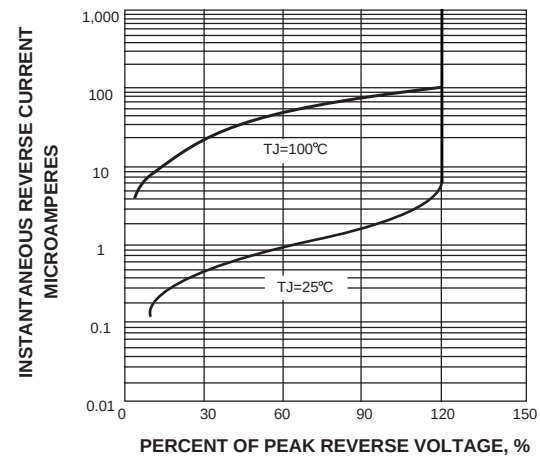


FIG. 5-TYPICAL JUNCTION CAPACITANCE

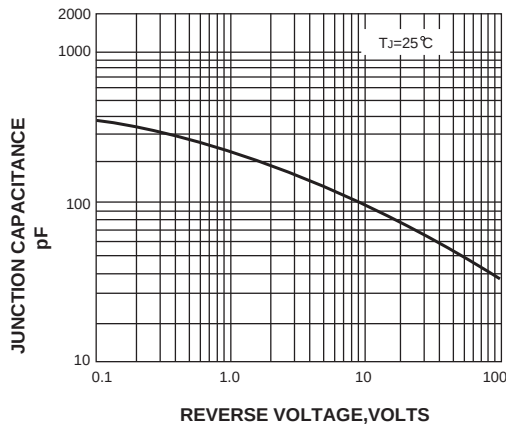


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

