



10A05 THRU 10A10

GENERAL PURPOSE SILICON RECTIFIER

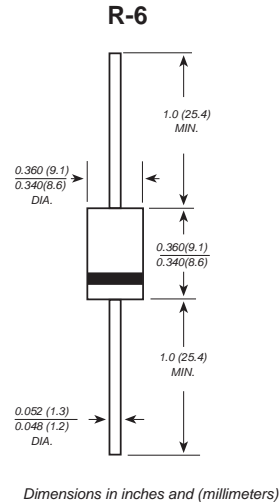
Reverse Voltage - 50 to 1000 Volts Forward Current - 10.0 Amperes

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:
 260°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%.

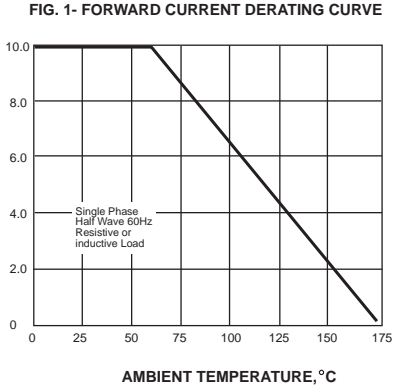
	SYMBOLS	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=60^\circ\text{C}$	$I_{(AV)}$	10.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	350							Amps
Maximum instantaneous forward voltage at 10.0A	V_F	1.0							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	10.0 200							μA
Typical junction capacitance (NOTE 1)	C_J	120							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10.0							$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

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

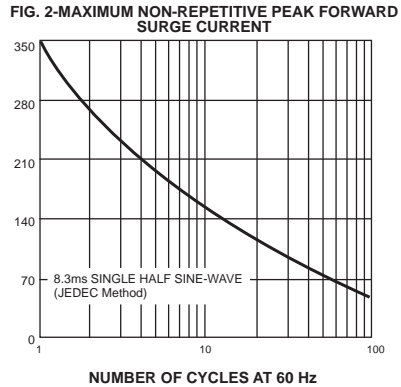


RATINGS AND CHARACTERISTIC CURVES 10A05 THRU 10A10

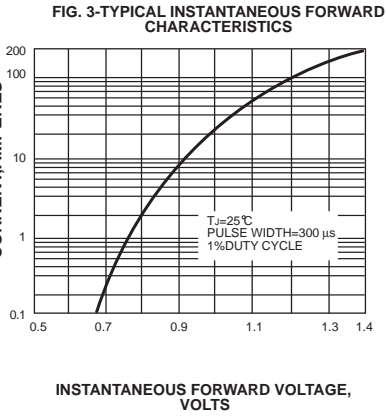
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



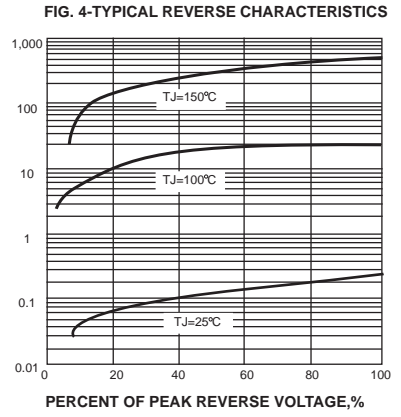
PEAK FORWARD SURGE CURRENT, AMPERES



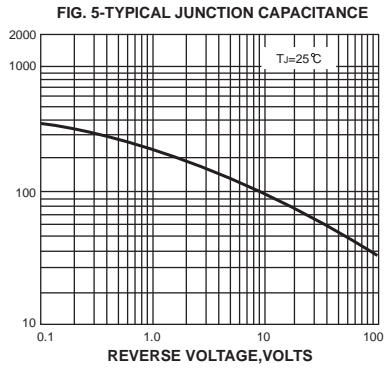
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, $^\circ\text{C}/\text{W}$

