

10A05 THRU 10A10

10.0 AMPS. SILICON RECTIFIERS

Voltage Range
50 to 1000 Volts
Current
10.0 Amperes

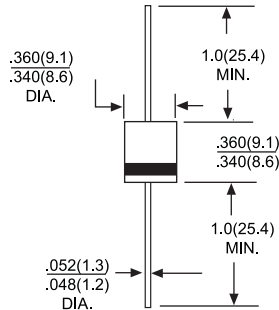
Features

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0

Mechanical Data

- Cases: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.074 ounce, 2.1 grams
- Mounting position: Any

R-6



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number		10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ T _A = 50°C	I _{F(AV)}	10.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated LoadM (JEDEC method)	I _{FSM}	600							A
Maximum Forward Voltage at 10A DC	V _F	1.0							V
Maximum DC Reverse Current @ T _J = 25°C at Rated DC Blocking Voltage @ T _J = 100°C	I _R	10.0 100							uA
Typical Junction Capacitance (Note 1)	C _J	150							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	10.0							°C/W
Operating Temperature Range	T _J	-50 to +125							°C
Storage Temperature Range	T _{STG}	-50 to +150							°C

NOTES: 1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
2. Thermal Resistance Junction to Ambient

RATING AND CHARACTERISTIC CURVES 10A05 THRU 10A10

FIG.1- FORWARD CURRENT DERATING CURVE

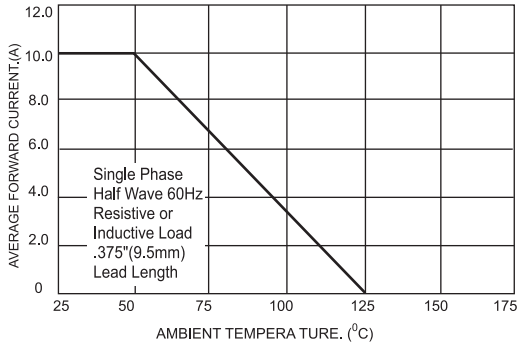


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

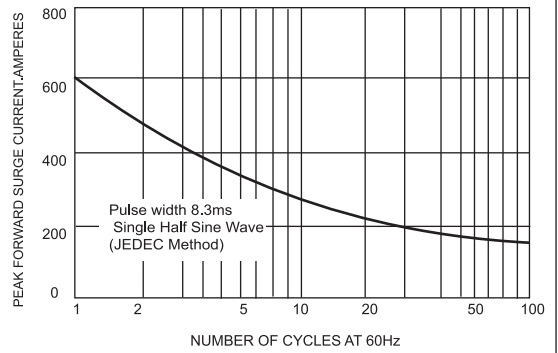


FIG.3- TYPICAL JUNCTION CAPACITANCE

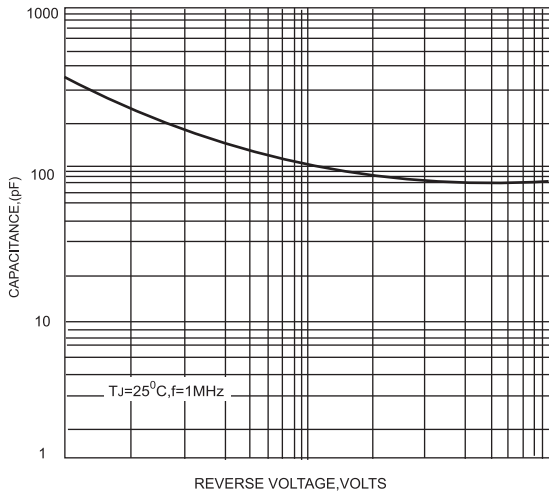


FIG.4- TYPICAL FORWARD CHARACTERISTICS

