10A005 THRU 10A10



10.0 AMP SILICON RECTIFIERS



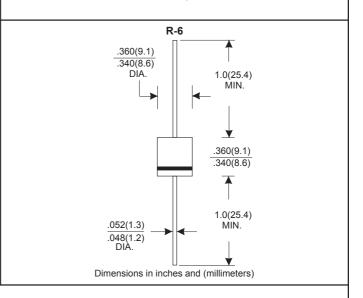
FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.65 grams

VOLTAGE RANGE 50 TO 1000 Volts CURRENT 10.0 Amperes



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

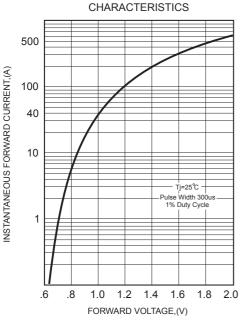
TYPE NUMBER	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current								
.375"(9.5mm) Lead Length at Ta=60°C		10.0						
Peak Forward Surge Current, 8.3 ms single half sine-wave								
superimposed on rated load (JEDEC method)		400					Α	
Maximum Instantaneous Forward Voltage at 10.0A		1.0						
Maximum DC Reverse Current Ta=25 ℃		10.0						μΑ
at Rated DC Blocking Voltage Ta=100℃		400						
Typical Junction Capacitance (Note 1)		100					pF	
Typical Thermal Resistance RθJA (Note 2)		10					°C/W	
Operating and Storage Temperature Range T _J , T _{STG}		-65—+150						°C

NOTES:

- 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.

RATING AND CHARACTERISTIC CURVES (10A005 THRU 10A10)

FIG.1-TYPICAL FORWARD CHARACTERISTICS 500 INSTANTANEOUS FORWARD CURRENT, (A) 100 40 10 Tj=25℃ Pulse Width 300u 1% Duty Cycle .6 1.2 1.4 1.6



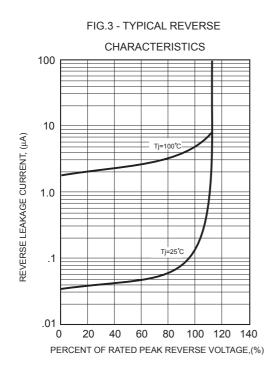


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

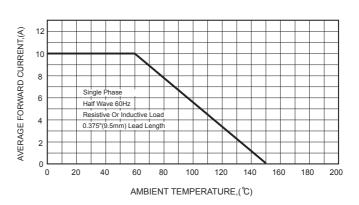


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

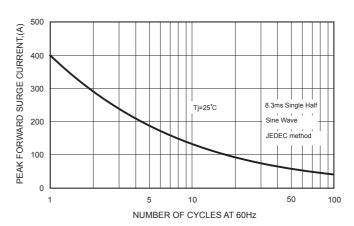


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH

