GOODWORK

10A05 THRU 10A10

10.0 AMP SILICON RECTIFIERS

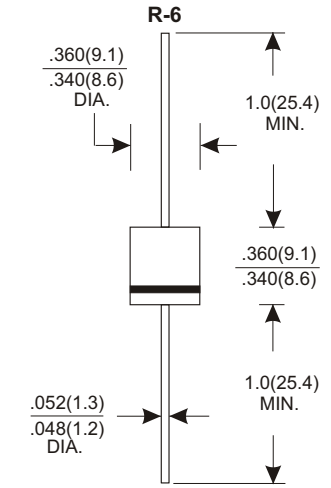
FEATURES

* 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 Amperes



Dimensions in inches and (millimeters)

Ratings at 25^{0}C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load..
For capacitive load, derate current 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 @T_A=50 ^{O}C	$I_{F(AV)}$	10							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300							Amps
Maximum forward voltage at 10A DC	V_F	1							Volts
Maximum DC reverse current @T_J = 25 ^{O}C at rated DC blocking voltage @T_J = 100^{O}C	I_R	10 100							μA
Typical junction capacitance (Note 1)	C_J	150							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	10							^{O}C/W
Operating temperature range	T_J	-55 to+125							^{O}C
Storage temperature range	T_S	-55 to+150							^{O}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 (10A05 THRU 10A10)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

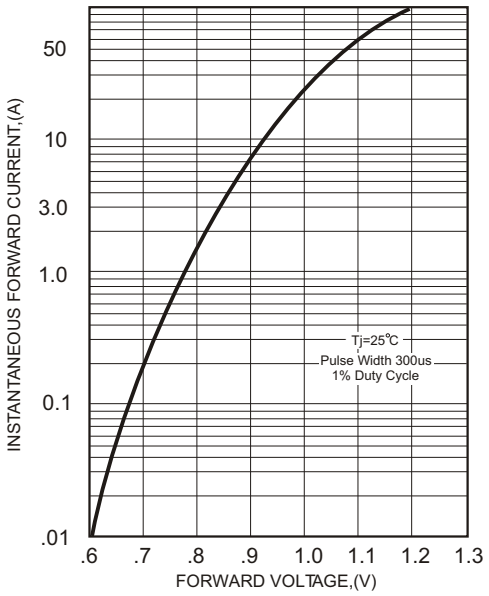


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

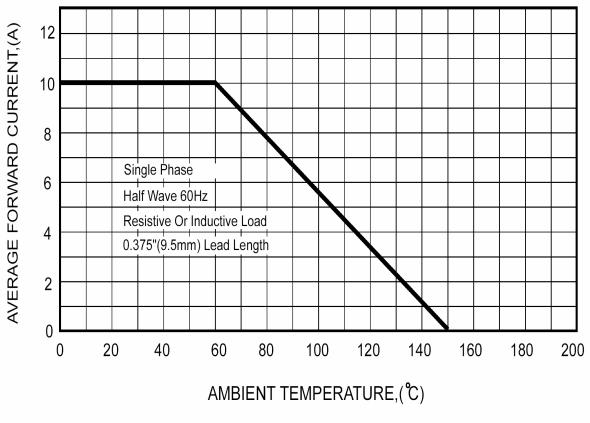


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

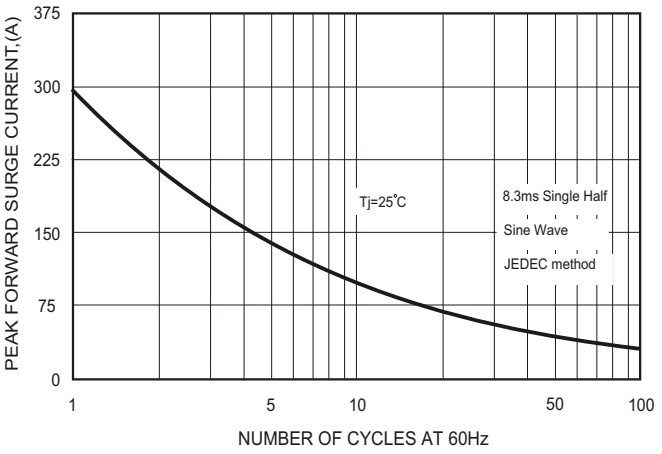


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

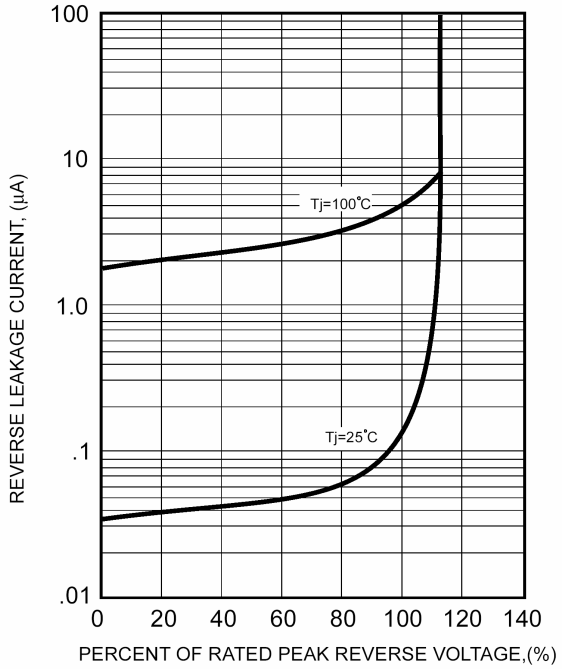


FIG.5 - TYPICAL THERMAL RESISTANCE VS. LEAD LENGTH