

10A Silicon Rectifiers

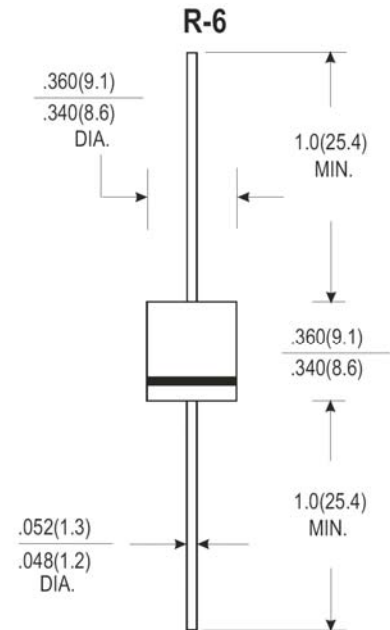
10A05 THRU 10A10 50 to 1000 V 10A

FEATURES

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

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed:
250°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg)tension
- Weight: 2.1gram



Dimensions in inches and (millimeters)

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, derate current by 20%.

Type Number	Symbols	10A05	10A1	10A2	10A4	10A6	10A8	10A10	Units
Maximum Recurrent 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 .375" (9.5mm) Lead Length @ $T = 75^{\circ}C$	$I_{(AV)}$	10.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	500							Amp
Maximum instantaneous Forward Voltage @6.0A	V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage $T_A=25^{\circ}C$ $T_A=100^{\circ}C$	I_R	5 50							μ Amp
Typical Junction Capacitance (Note 1)	C_J	100							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	10							$^{\circ}C/W$
Operating Temperature Range	T_J	-55 to +150							$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 to +150							$^{\circ}C$

NOTES:

1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
2. Thermal Resistance from Junction to Ambient .375"(9.5mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES (10A05 THRU 10A10)

FIG.1: FORWARD CURRENT DERATING CURVE

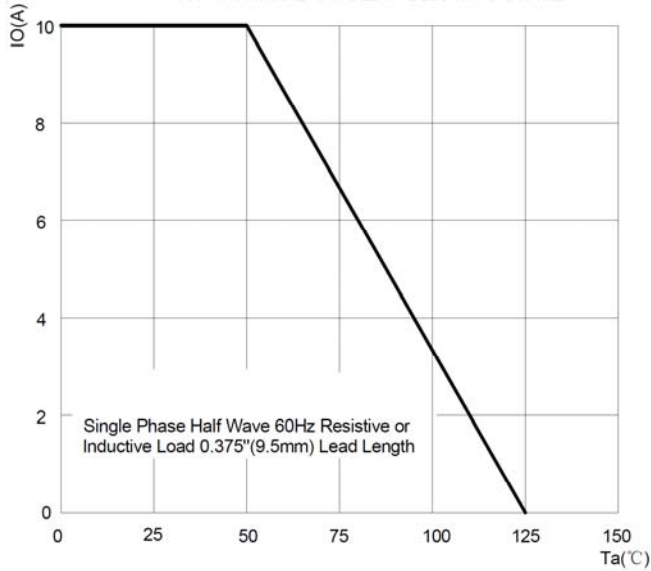


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

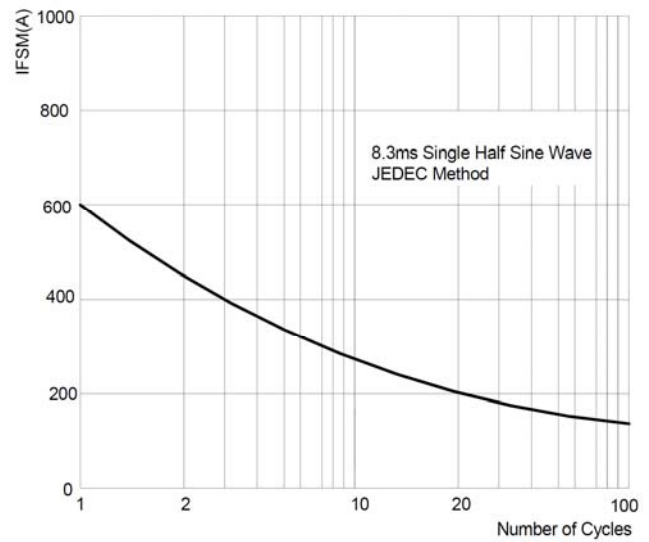


FIG.3: TYPICAL FORWARD CHARACTERISTICS

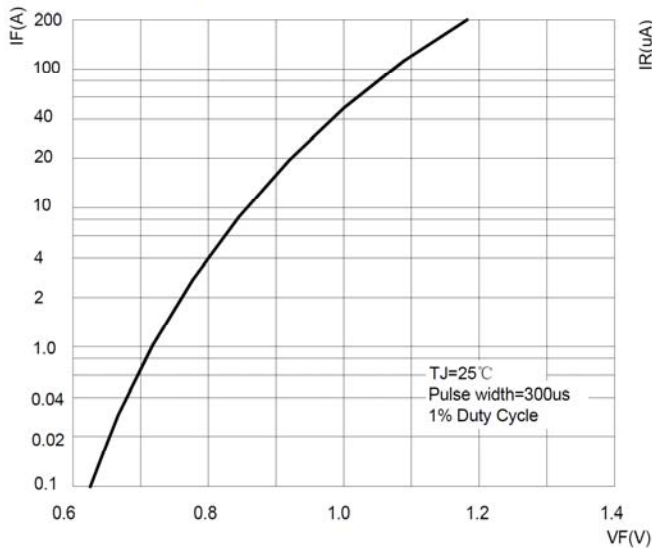


FIG.4: TYPICAL REVERSE CHARACTERISTICS

