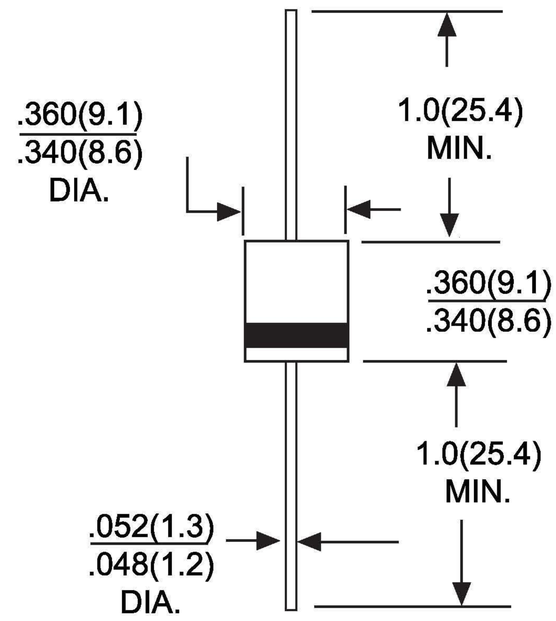
10A05 THRU 10A10

10.0 AMPS. SILICON RECTIFIERS

Voltage Range
50 to 1000 Volts
Current
10.0 Amperes

R-6



Dimensions in inches and (millimeters)

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

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
Maximun 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)	$R_{\theta JA}$	10.0							°C/W
Operating Temperature Range	T_J	-50 to + 200							°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

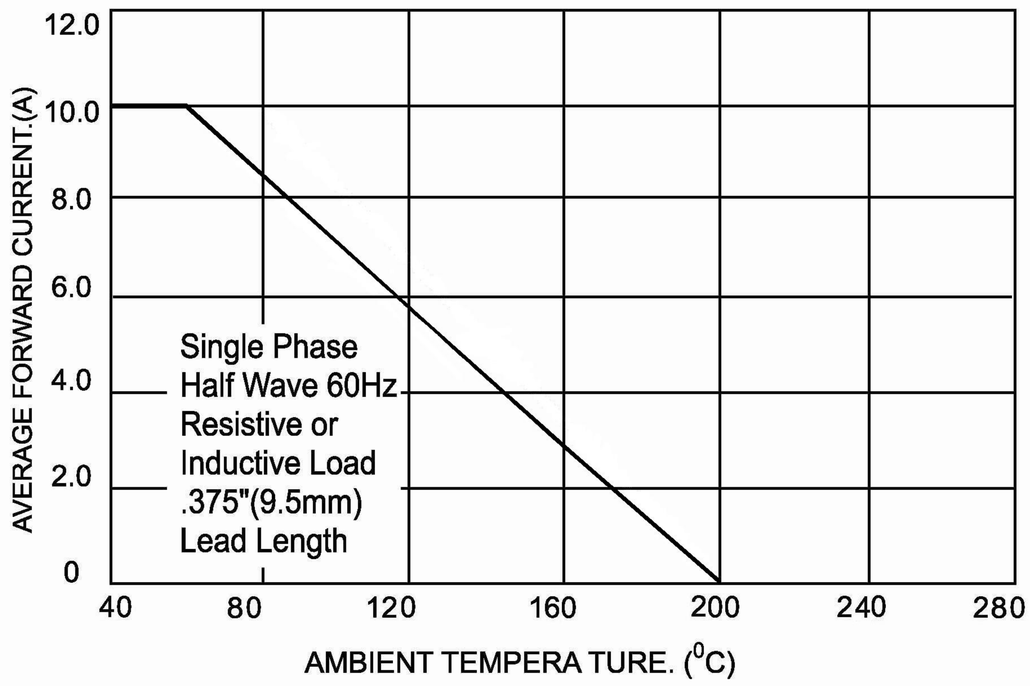


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

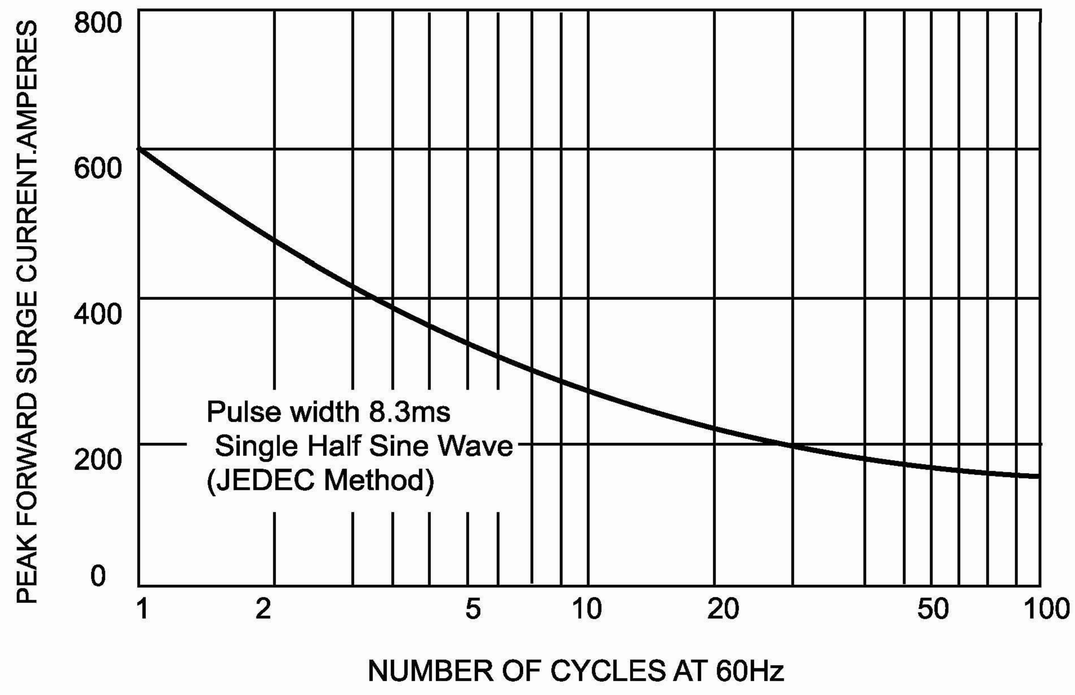


FIG.3- TYPICAL JUNCTION CAPACITANCE

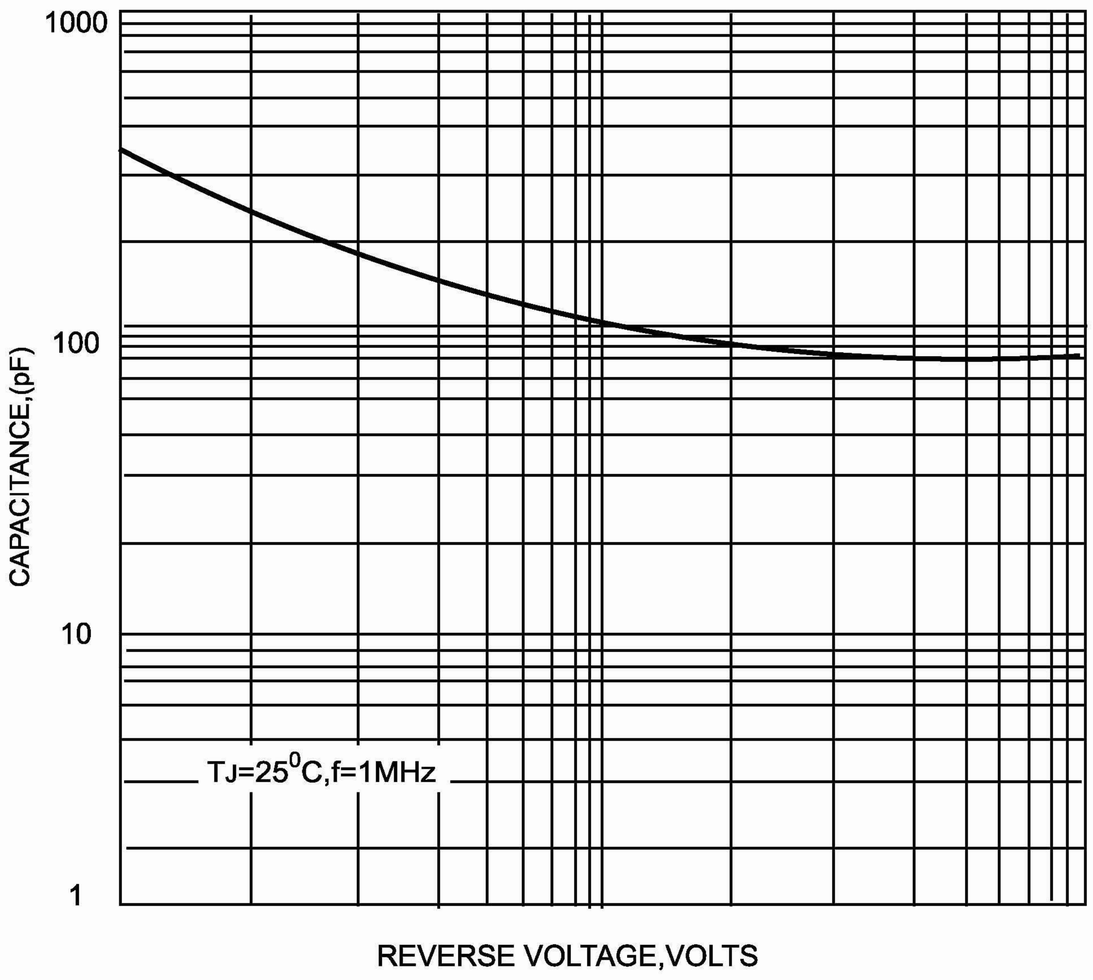
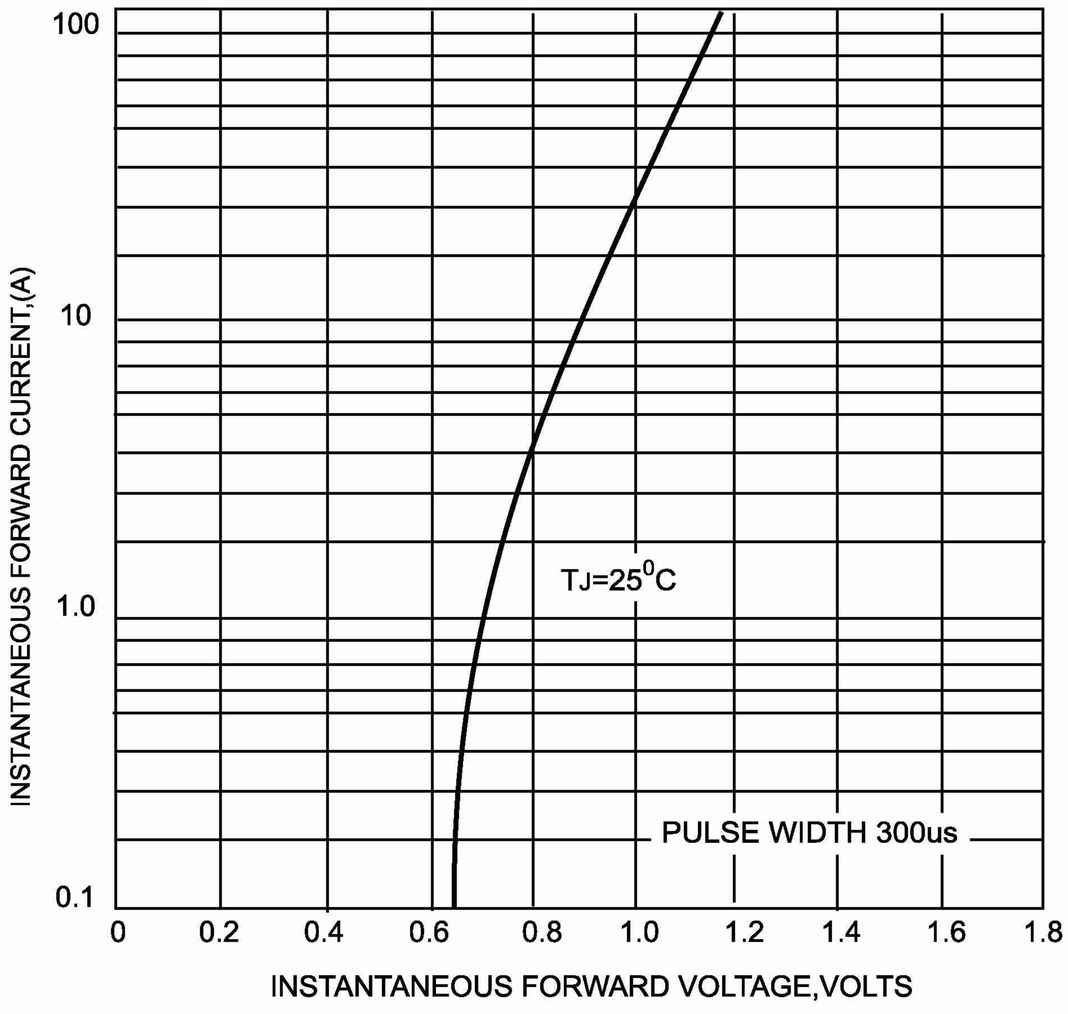



FIG.4-TYPICAL FORWARD CHARACTERISTICS