10A05 THRU 10A10

Reverse Voltage - 50 to 1000 Volts Forward Current - 10.0 Ampere

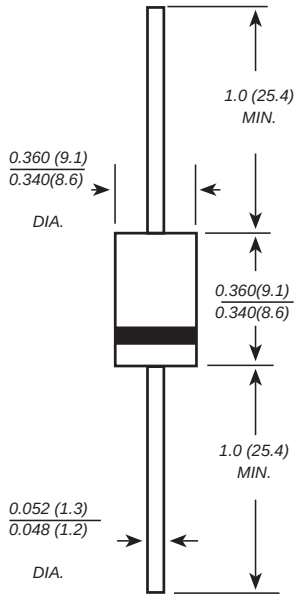
GENERAL PURPOSE SILICON RECTIFIER

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension

R-6

RoHS COMPLIANT



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC R-6 Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.072 ounce, 2.05 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter	SYMBOLS	10A05	10A1	10A2	10A4	10A6	10A8	10A10	UNITS
Marking Code		MDD 10A05	MDD 10A1	MDD 10A2	MDD 10A4	MDD 10A6	MDD 10A8	MDD 10A10	
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 0.375”(9.5mm) lead length at T_A=60°C	$I_{(AV)}$	10.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	600							A
Maximum instantaneous forward voltage at 10.0A	V_F	1.0							V
Maximum DC reverse current T_A=25°C at rated DC blocking voltage T_A=100°C	I_R	10.0 100							μA
Typical junction capacitance (NOTE 1)	C_J	150							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	10.0							°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-50 to +150							°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.Thermal resistance from junction to ambient at 0.375”(9.5mm)lead length,P.C.B. mounted

Download from alldatasheet.com

Ratings And Characteristic Curves

FIG. 1 -- TYPICAL FORWARD CHARACTERISTIC

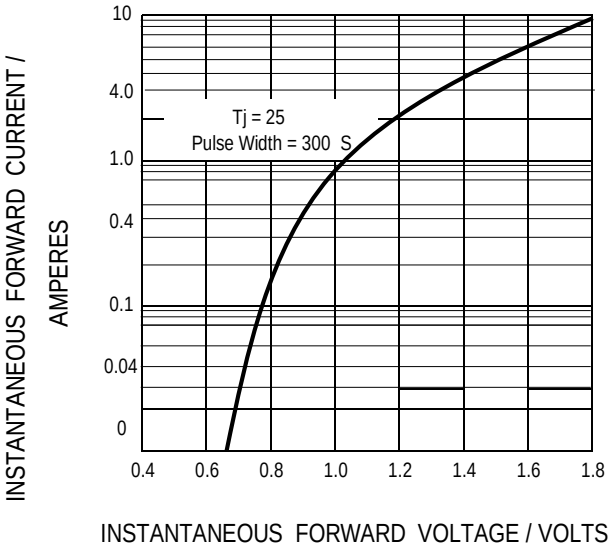


FIG. 2 -- TYPICAL JUNCTION CAPACITANCE

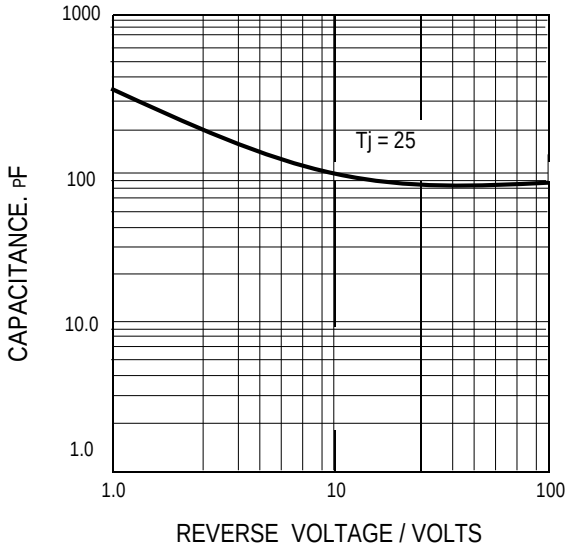


FIG. 3 -- FORWARD CURRENT DERATING CURVE

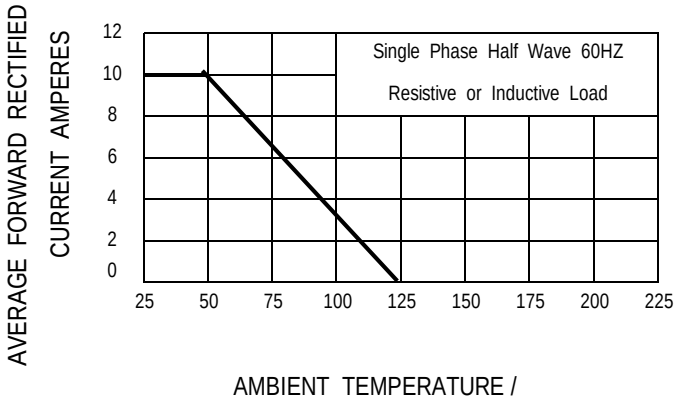
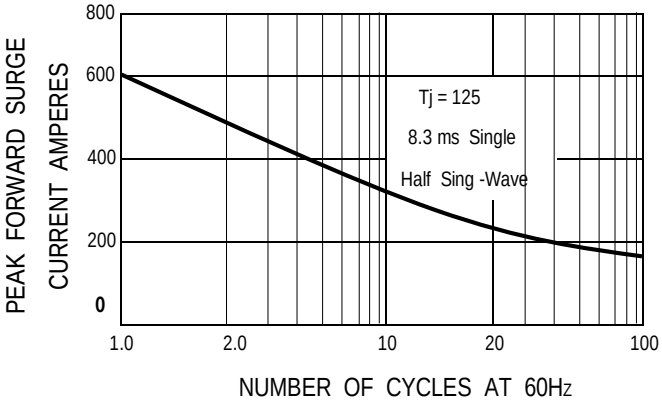


FIG. 4 -- PEAK FORWARD SURGE CURRENT



The curve above is for reference only.

Download from alldatasheet.com