

10A01-10A07

PRV : 50 - 1000 Volts
Io : 10 Amperes

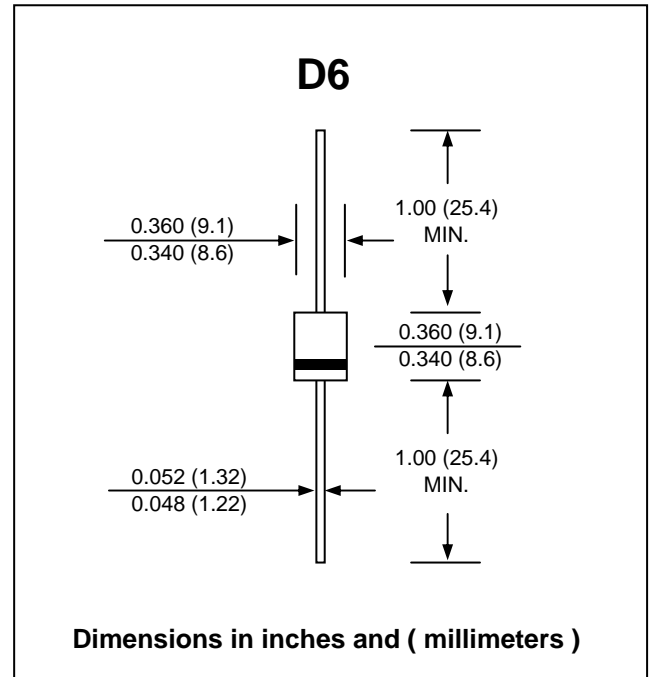
FEATURES :

- * Diffused Junction
- * High current capability and Low Forward Voltage Drop
- * Surge Overload Rating to 400A Peak
- * Low Reverse Leakage Current
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 2.049 grams

SILICON RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL	10A01	10A02	10A03	10A04	10A05	10A06	10A07	UNIT
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
Average Rectified Output Current (Note 1) $T_a = 50\text{ }^\circ\text{C}$	I_o	10							A
Non-Repetitive Peak Forward Surge Current 8.3 ms Single half sine wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							A
Maximum Forward Voltage at $I_F = 10\text{ Amps.}$	V_F	1.0							V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	I_R	10							μA
	$I_{R(H)}$	100							μA
Typical Junction Capacitance (Note 2)	C_j	150				80			pF
Typical Thermal Resistance	$R_{\theta JC}$	10							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	- 65 to + 150							$^\circ\text{C}$

Notes :

- (1) Leads maintained at ambient temperature at a distance of 9.5 mm fro, the case.
- (2) Measured at 1.0 MHz and applied reverse volage of 4.0V DC.

RATING AND CHARACTERISTIC CURVES (10A01 - 10A07)

FIG.1 - FORWARD CURRENT DERATING CURVE

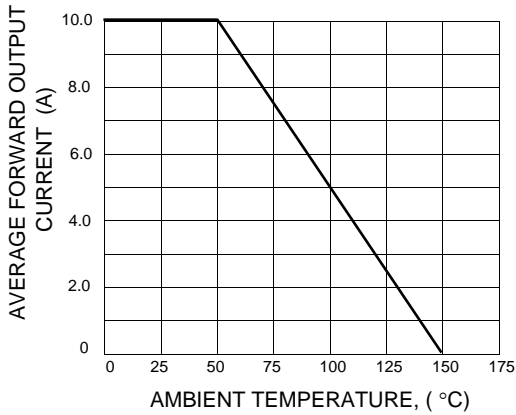


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

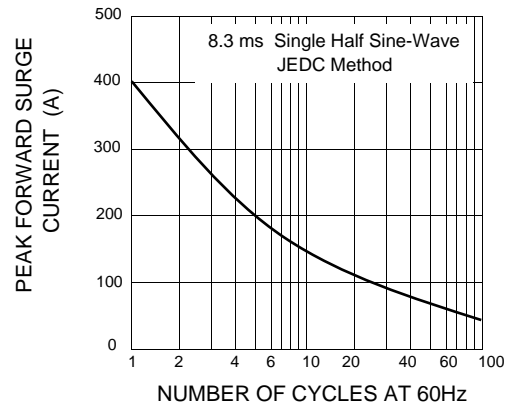


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

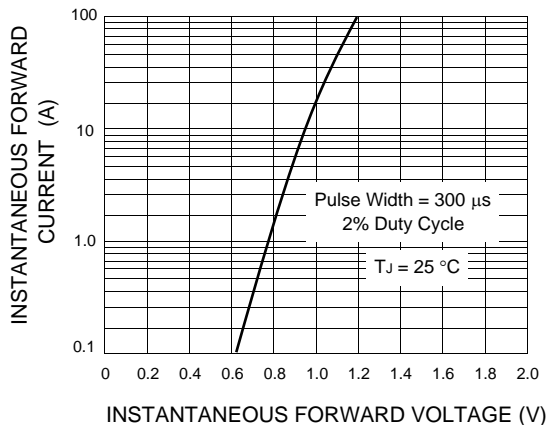


FIG.4 - TYPICAL JUNCTION CAPACITANCE

