

P600AS - P600MS

PRV : 50 - 1000 Volts
Io : 6 Amperes

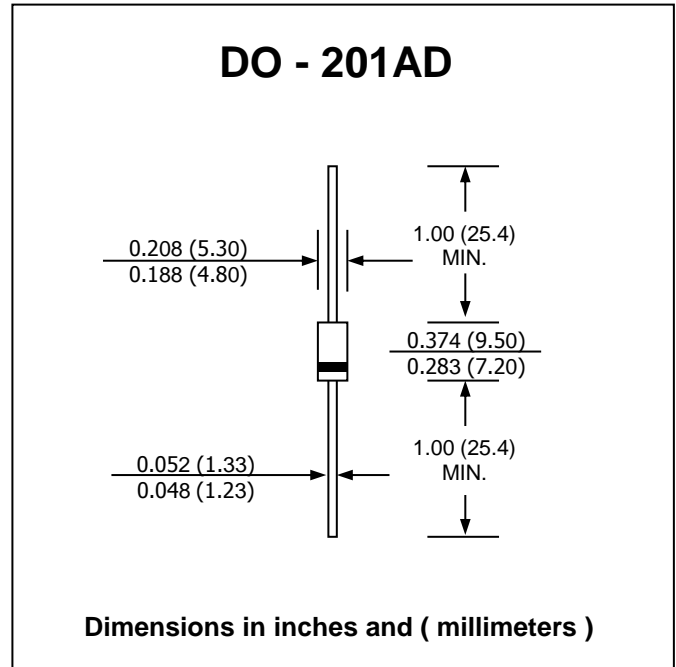
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-201AD Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 1.16 grams

SILICON RECTIFIER DIODES



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	P600AS	P600BS	P600DS	P600GS	P600JS	P600KS	P600MS	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
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 60 °C	I _{F(AV)}	6.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	300							A
Maximum Instantaneous Forward Voltage at I _F = 6 A	V _F	1.0							V
Maximum DC Reverse Current Ta = 25 °C at rated DC Blocking Voltage Ta = 100 °C	I _R	5.0							μA
	I _{R(H)}	1.0							mA
Typical junction capacitance at 4.0V, 1MHz	C _J	150							pF
Typical Thermal Resistance (1)	R _{θJA}	20							°C/W
Typical reverse recovery time (2)	T _{rr}	2.5							μs
Junction Temperature Range	T _J	- 50 to + 150							°C
Storage Temperature Range	T _{STG}	- 50 to + 150							°C

Notes :

- (1) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.
- (2) Reverse Recovery Test Conditions : I_F=0.5A, I_R=1.0A, I_{rr}=0.25A

RATING AND CHARACTERISTIC CURVES (P600AS - P600MS)

FIG.1 - MAXIMUM FORWARD CURRENT DERATING CURRENT

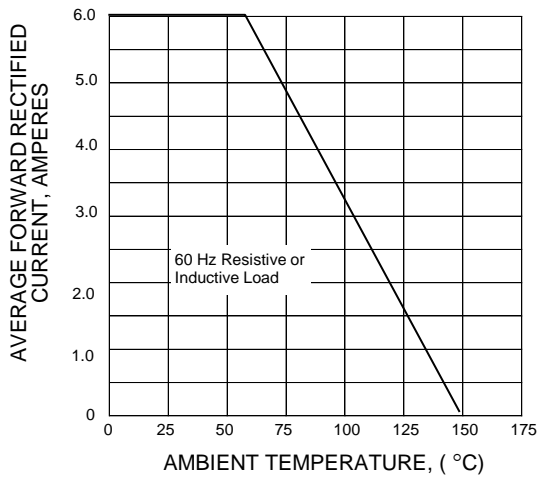


FIG.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

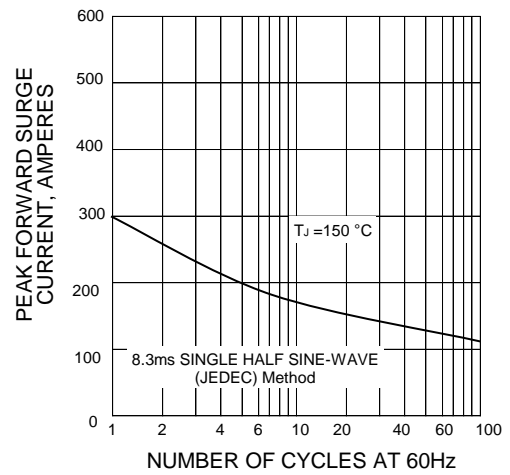


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

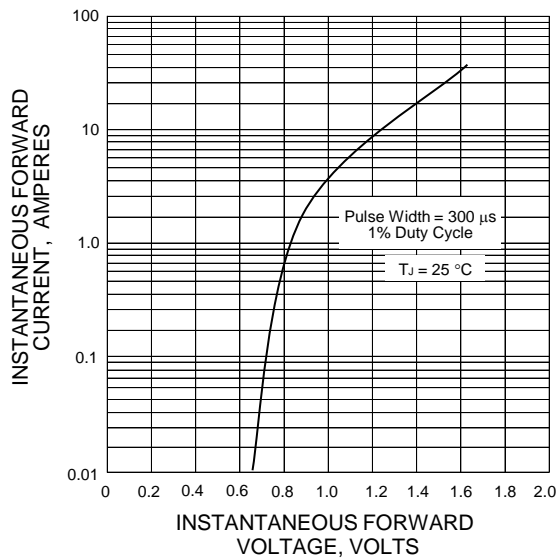


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

