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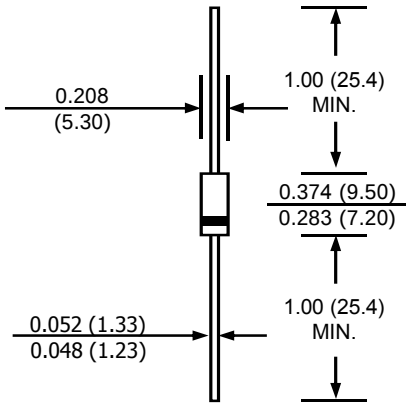
BY1600

SILICON RECTIFIER DIODE

PRV : 1600 Volts
Io : 3.0 Amperes

DO - 201AD



Dimensions in inches and (millimeters)

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 : 0.929 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1600	V
Maximum RMS Voltage	V_{RMS}	1120	V
Maximum DC Blocking Voltage	V_{DC}	1600	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 50 °C	I_F	3.0	A
Peak Forward Surge Current 50/60 Hz half sine wave Superimposed	I_{FSM}	100/110	A
Maximum Forward Voltage at I_F = 3.0 Amps.	V_F	1.1	V
Maximum Reverse Current $V_R = V_{RRM}$ Tj = 25 °C	I_R	20	μA
Thermal Resistance Junction to Ambient air (Note1)	$R_{\Theta JA}$	25	K/W
Thermal Resistance Junction to Lead	$R_{\Theta JL}$	10	K/W
Operating Junction Temperature Range	T_J	- 50 to + 150	°C
Storage Temperature Range	T_{STG}	- 50 to + 175	°C

Note : (1) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

RATING AND CHARACTERISTIC CURVES(BY1600)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

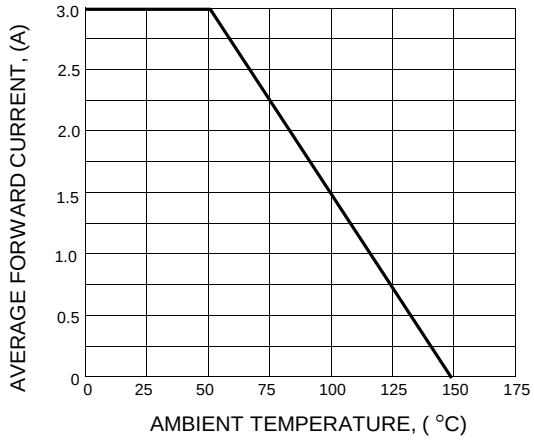


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

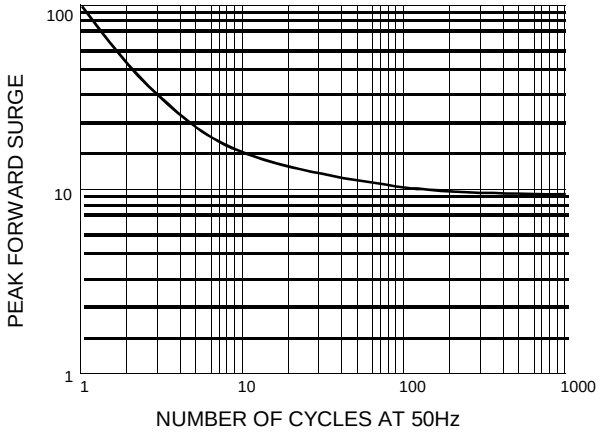


FIG.3 - TYPICAL FORWARD CHARACTERISTICS