

BYM36CG

Glass passivated junction Fast soft-recovery controlled avalanche rectifiers

VOLTAGE : 600V

CURRENT: 3.0A

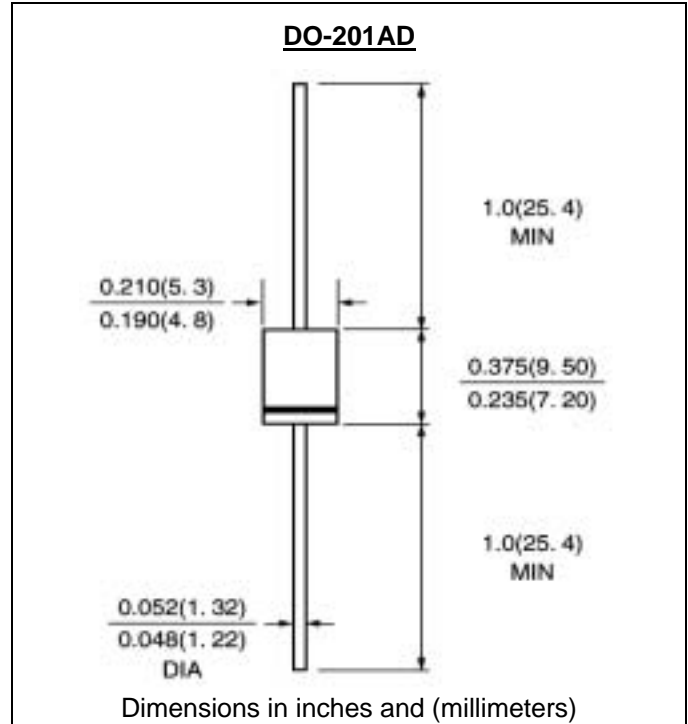


FEATURE

Plastic package has Underwriters Laboratories
Flammability Classification 94V-0
High temperature soldering guaranteed
250°C /10sec/0.375"lead length
5 lbs tension
Low leakage current Typical $I_r < 0.1\mu A$
Excellent stability
Glass passivated junction
Guaranteed avalanche energy absorption capability
Fast soft-recovery controlled avalanche rectifiers

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	BYM36CG	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	600	V
Maximum RMS Voltage	V _{rms}	420	V
Maximum DC blocking Voltage	V _{dc}	600	V
Maximum Average Forward Rectified Current 10mm lead length at T _a =55°C	I _{f(av)}	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	65	A
Maximum Forward Voltage at rated Forward Current 2A and 25°C	V _f	1.6	V
non-repetitive peak reverse avalanche energy (Note 1)	E _{rrm}	10	mJ
Maximum DC Reverse Current T _a =25°C at rated DC blocking voltage T _a =150°C	I _r	10.0 150.0	μA μA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	100	nS
Typical Junction Capacitance (Note 3)	C _j	85.0	pF
Typical Thermal Resistance (Note 4)	R _{ja}	75.0	°C /W
Storage and Operating Junction Temperature	T _{stg} , T _j	-55 to +150	°C

Note: 1. L = 120 mH; T_j = T_{j max} prior to surge; inductive load switched off

2.Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A

3.Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

4.Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES BYM36CG

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Fig.1 Maximum average forward current as a function of tie-point temperature (including losses due to reverse leakage).

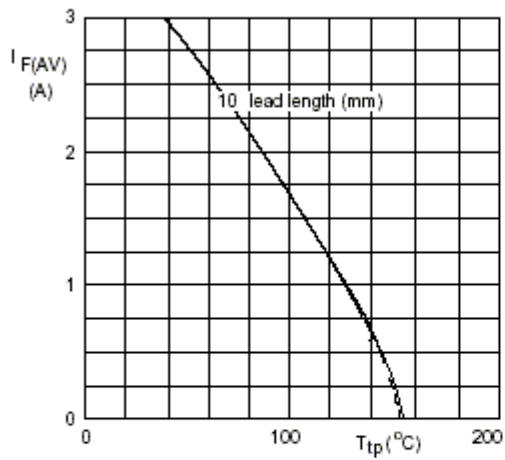


Fig.2 Forward current as a function of forward voltage; maximum values.

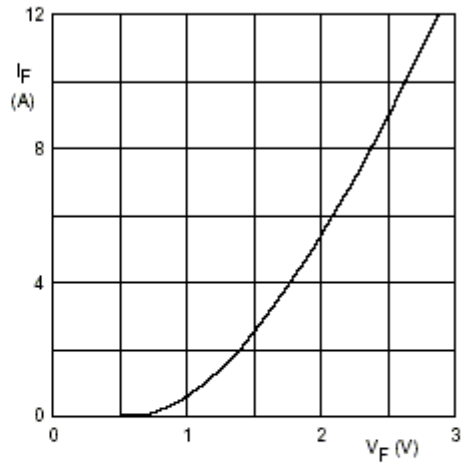


Fig.3 Reverse current as a function of junction temperature; maximum values.

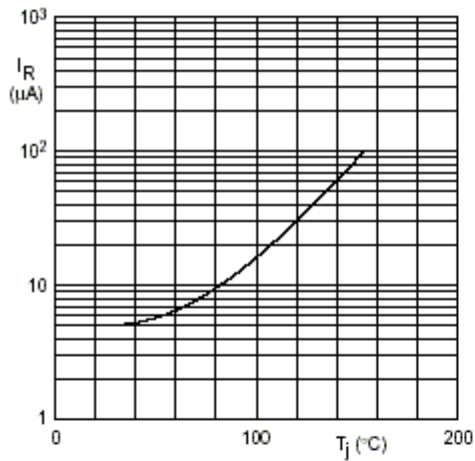


Fig.4 Diode capacitance as a function of reverse voltage; typical values.

