BY255GP

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:1300V CURRENT: 3.0A

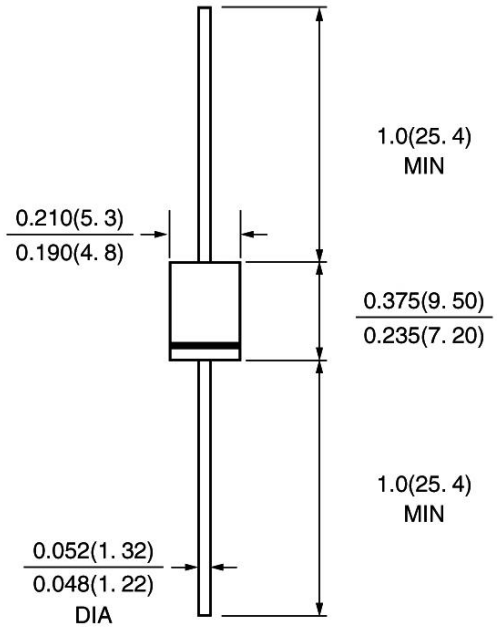
FEATURE

High temperature metallurgically bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
350℃ /10sec/0.375”lead length at 5 lbs tension
Operate at Ta =55℃ with no thermal run away
Typical Ir<0.1μA

MECHANICAL DATA

Terminal: Plated axial leads solderable per J-STD-002
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbol	BY255GP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1300	V
Maximum RMS Voltage	Vrms	910	V
Maximum DC blocking Voltage	Vdc	1300	V
Maximum Average Forward Rectified Current 3/8”lead length at Ta =55℃	If(av)	3.0	A
Peak Forward Surge Current 10ms single Half sine-wave superimposed on rated load	Ifsm	100	A
Maximum Instantaneous Forward Voltage at 3.0A	Vf	1.0	V
Maximum full load reverse current full cycle Average at 55℃	Ir(av)	100.0	μA
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =150℃	Ir	5.0 100.0	μA
Typical Reverse Recovery Time (Note 1)	Trr	3.0	μS
Typical Junction Capacitance (Note 2)	Cj	40.0	pF
Typical Thermal Resistance (Note 3)	Rth(ja) Rth(jl)	20.0 10.0	℃/W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175	℃

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient and from Junction to Lead at 3/8”lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES BY255GP

Fig 1 - Forward Current Derating Curve

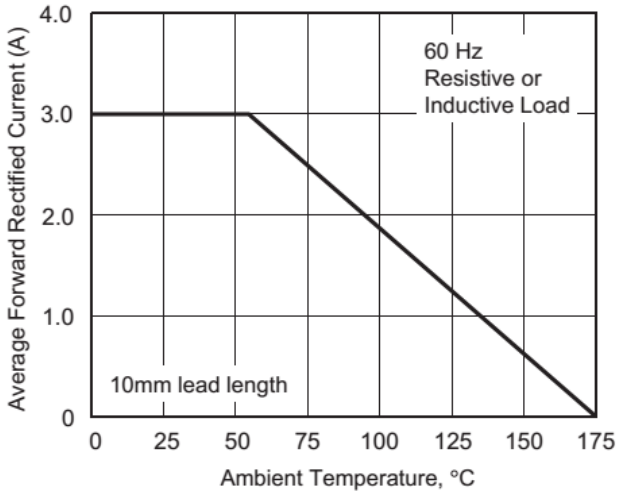


Fig 2 - Maximum Non-repetitive Peak Forward Surge Current

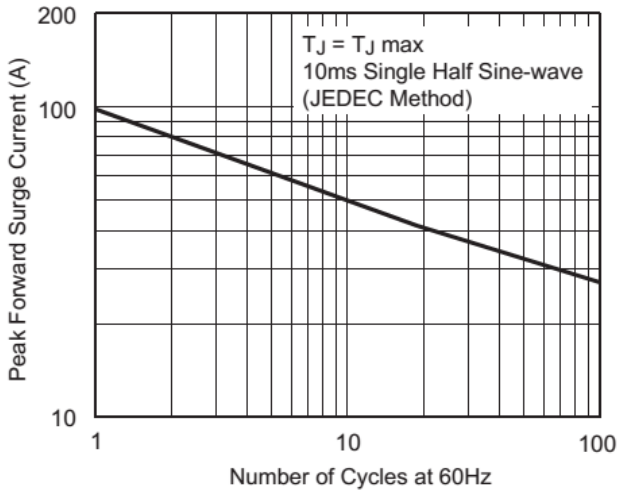


Fig 3 - Typical Instantaneous Forward Characteristics

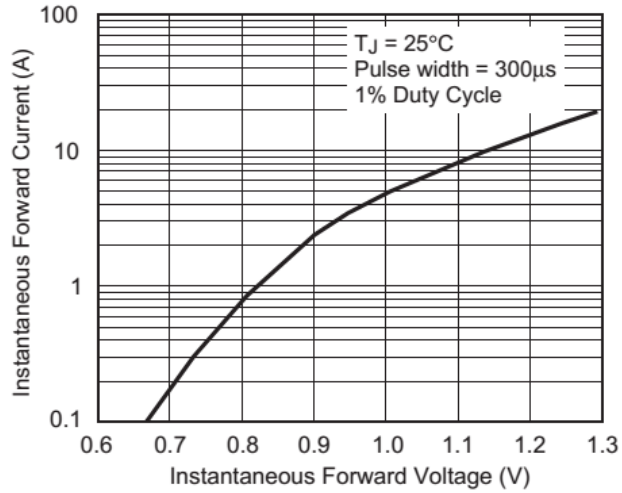


Fig 2 - Maximum Non-repetitive Peak Forward Surge Current

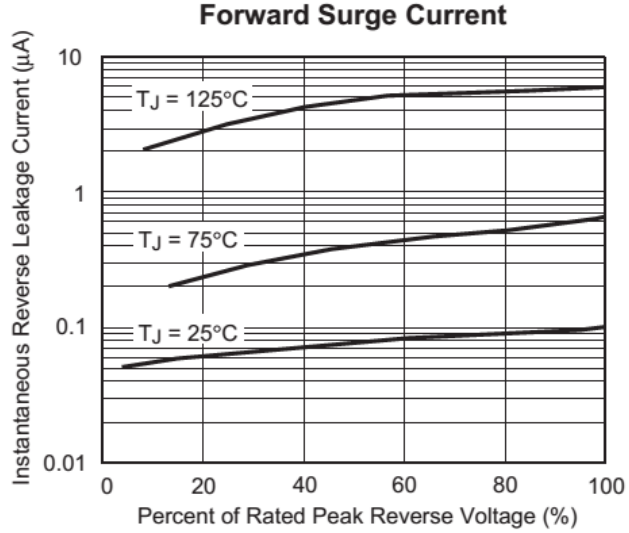


Fig 5 - Typical Junction Capacitance