

BYV36AGP THRU BYV36EGP

**SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER**
VOLTAGE: 200 - 1000V CURRENT: 1.5A

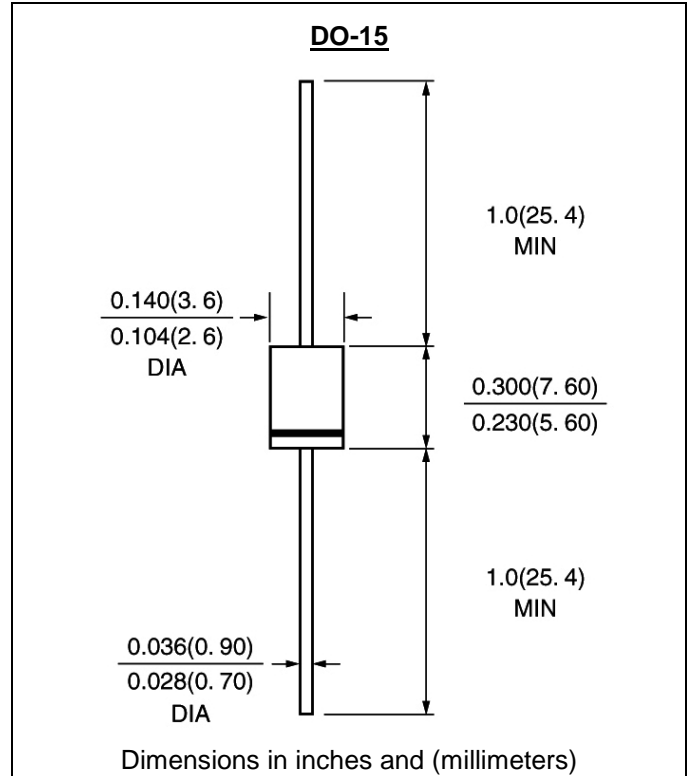


FEATURE

High temperature metallurgic ally bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
350°C /10sec/0.375"lead length at 5 lbs tension
Operate at Ta =35°C with no thermal run away
Typical Ir<0.1µA

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

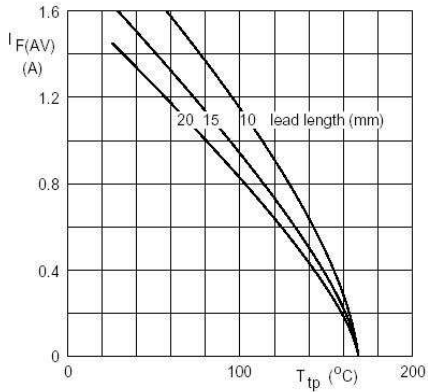
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	BYV36A GP	BYV36B GP	BYV36C GP	BYV36D GP	BYV36E GP	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	200	400	600	800	1000	V
Maximum RMS Voltage	V _{rms}	140	280	420	560	700	V
Maximum DC blocking Voltage	V _{dc}	200	400	600	800	1000	V
Reverse avalanche breakdown voltage at IR = 0.1 mA	V _{(BR)R} (min)	300	500	700	900	1100	V
Maximum Average Forward Rectified T _{tp} = 60 °C; lead length = 10 mm;	I _{f(av)}	1.6			1.5		A
Peak Forward Surge Current t = 10 ms half sine wave; T _j = T _{j max}	I _{fsm}	30					A
Maximum Forward Voltage at rated Forward Current and 50°C	V _f	1.35			1.45		V
Non-repetitive peak reverse avalanche energy (Note 1)	ERSM	10					mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	I _r	5.0 150.0					µA µA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	100			150		nS
Typical Junction Capacitance (Note 3)	C _j	45			40		pF
Typical Thermal Resistance (Note 4)	Rθja	55.0					°C /W
Storage and Operating Junction Temperature	T _{stg, Tj}	-65 to +175					°C

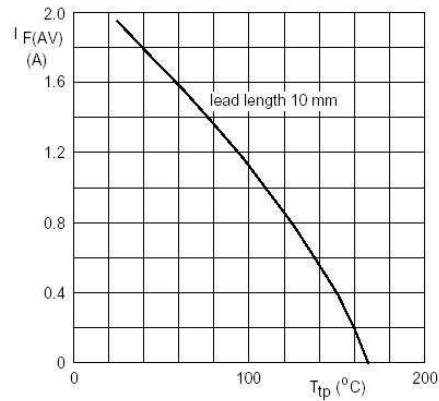
Note: 1.R=400mA; T_j=T_{jmax} prior to surge; inductive load switched off
2.Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
3.Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
4.Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES BYV36AGP THRU BYV36EGP

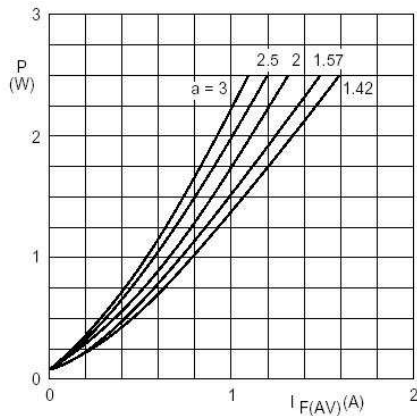
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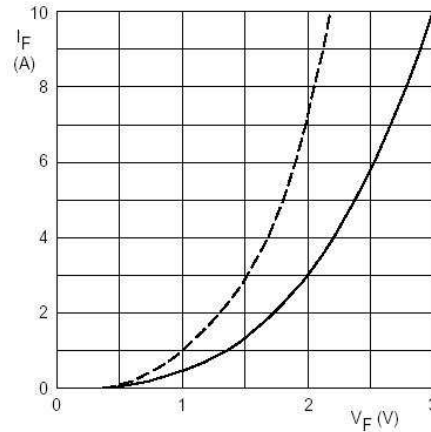
Maximum average forward current as a function of tie-point temperature (including losses due to reverse leakage).



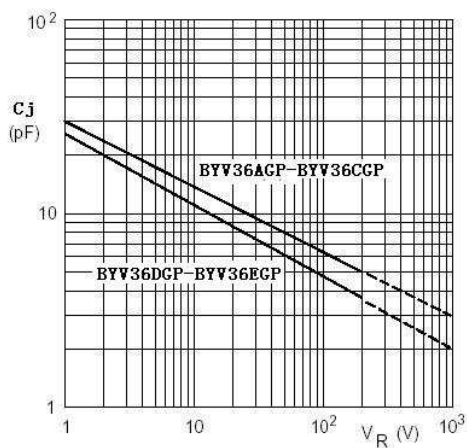
Maximum average forward current as a function of tie-point temperature (including losses due to reverse leakage).



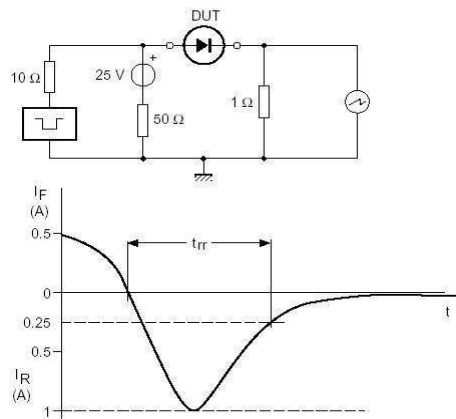
Maximum steady state power dissipation (forward plus leakage current losses, excluding switching losses) as a function of average forward current.



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



Diode capacitance as a function of reverse voltage, typical values.



Test circuit and reverse recovery time waveform and definition.