BYV27-4GP BYV27-6GP

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE：400V to 600V **CURRENT: 2.0A**

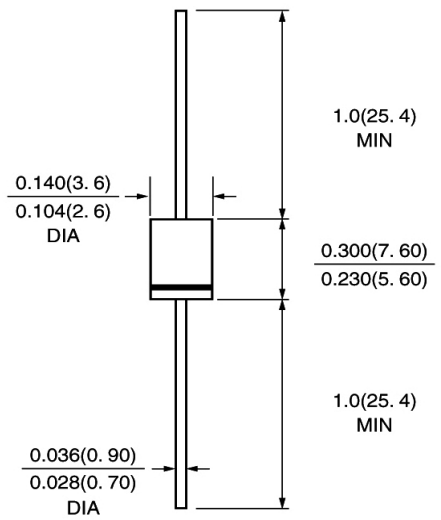
FEATURE

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

DO-15/DO-204AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYV27-4GP	BYV27-6GP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	400	600	V
Maximum RMS Voltage	Vrms	280	420	V
Maximum DC blocking Voltage	Vdc	400	600	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	2.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50		A
Maximum Forward Voltage at rated Forward Current and 50°C	Vf	1.05	1.25	V
non-repetitive peak reverse avalanche energy (Note 1)	Ersm	20		mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	5.0 150.0		μA μA
Maximum Reverse Recovery Time (Note 2)	Trr	50		nS
Typical Junction Capacitance (Note 3)	Cj	50		pF
Typical Thermal Resistance (Note 4)	R θ ja	20.0		°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175		°C

Note:
1. R=400mA; Tj=Tjmax prior to surge; inductive load switched off
2. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =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

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FIG. 1 - FORWARD CURRENT DERATING CURVE

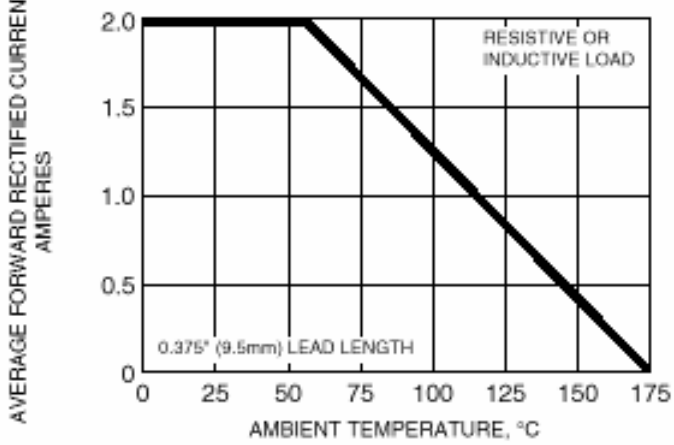

FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

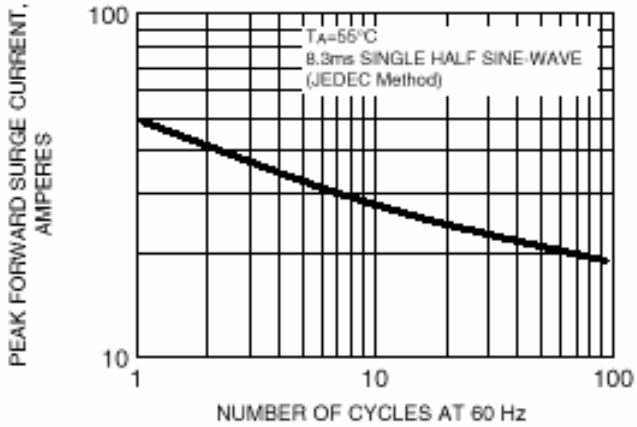

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

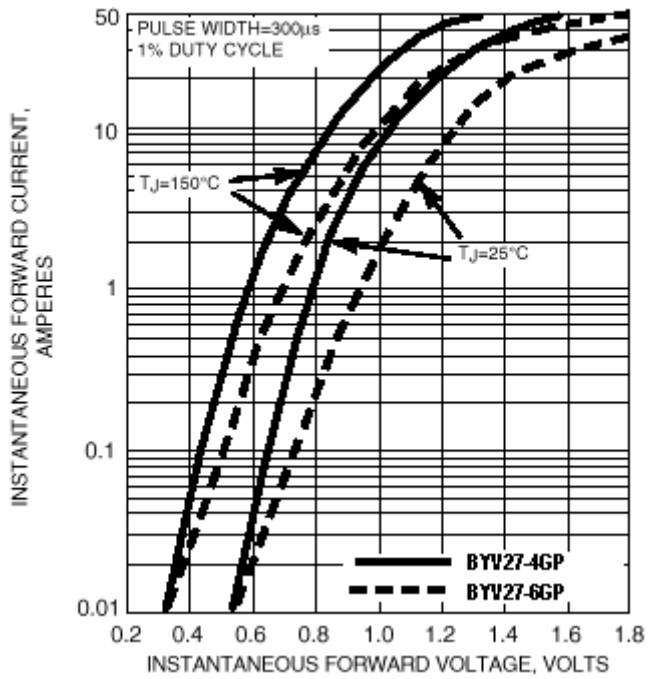

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

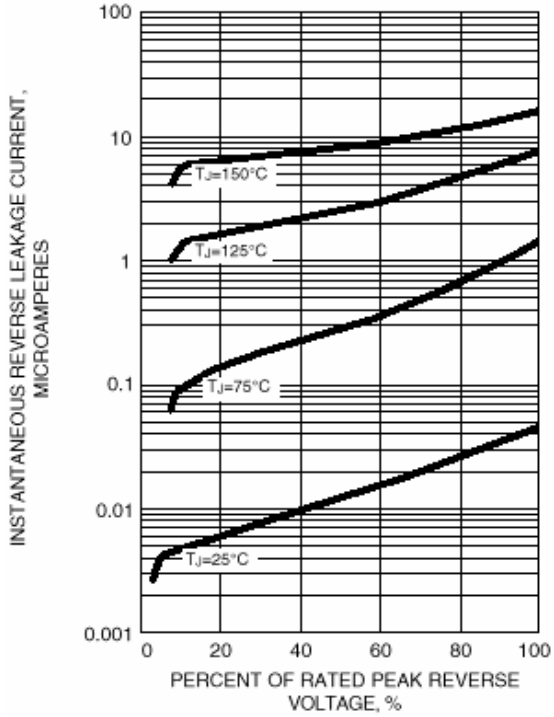

FIG. 5 - TYPICAL JUNCTION CAPACITANCE

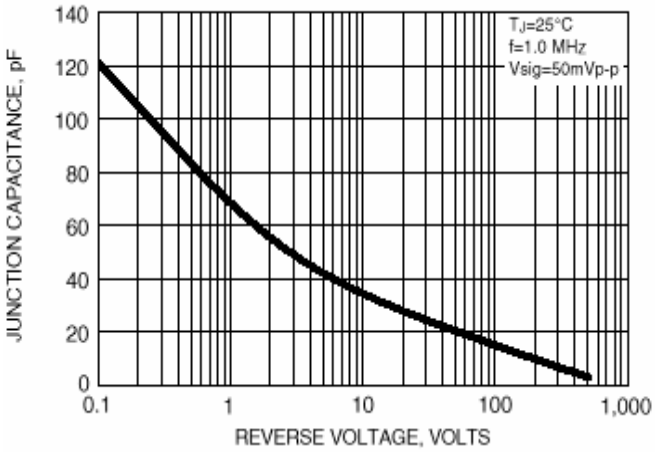
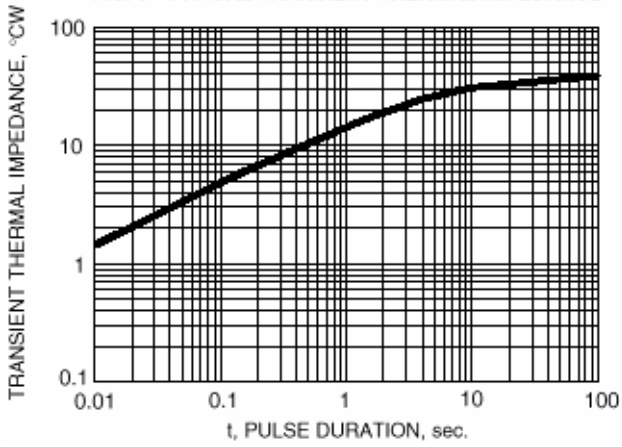
FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE