BYV27-1GE THRU BYV27-2GE

GLASS PASSIVATED JUNCTION
ULTRAFAST EFFICIENT SILICON RECTIFIER

VOLTAGE：100 TO 200V CURRENT： 2.0A

GULF SEMI

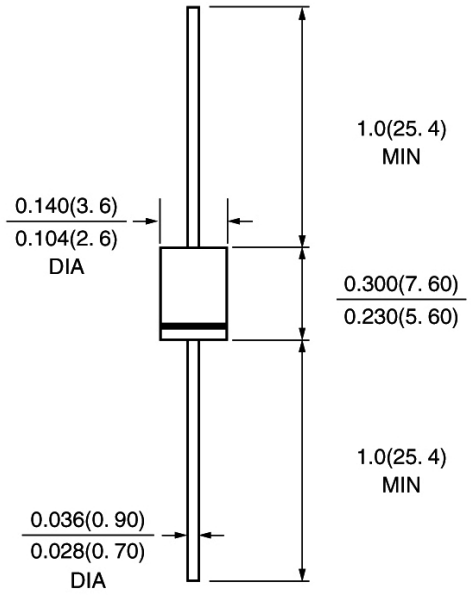
FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250℃/10sec/0.375″ lead length at 5 lbs tension

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℃, unless otherwise stated)

	SYMBOL	BYV27-1GE	BYV27-2GE	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	100	200	V
Maximum RMS Voltage	Vrms	70	140	V
Maximum DC blocking Voltage	Vdc	100	200	V
Maximum Average Forward Rectified Current 3/8″ lead length at Ta =55℃	If(av)	2.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50.0		A
Maximum Forward Voltage at Forward current 2.0A Peak	Vf	0.98		V
non-repetitive peak reverse avalanche energy (Note 1)	Ersm	20		mJ
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	5.0 150.0		μA μA
Maximum Reverse Recovery Time (Note 2)	Trr	25		nS
Typical Junction Capacitance (Note 3)	Cj	15		pF
Typical Thermal Resistance (Note 4)	R(ja)	45		℃/W
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150		℃

Note: 1.L = 120 mH; Tj = Tj max 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

RATINGS AND CHARACTERISTIC CURVES BYV27-1GE THRU BYV27-2GE

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FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVES

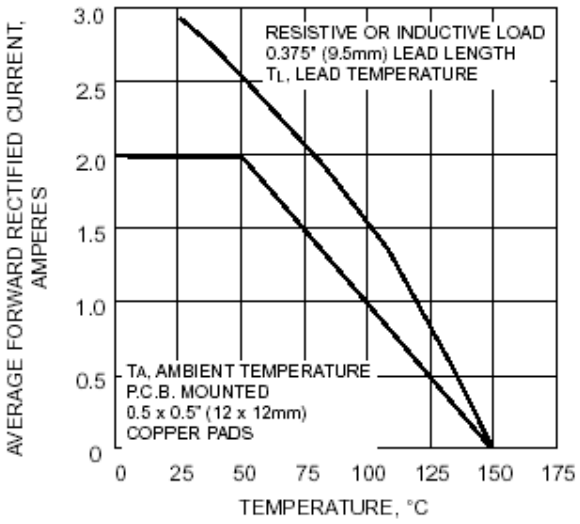

FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

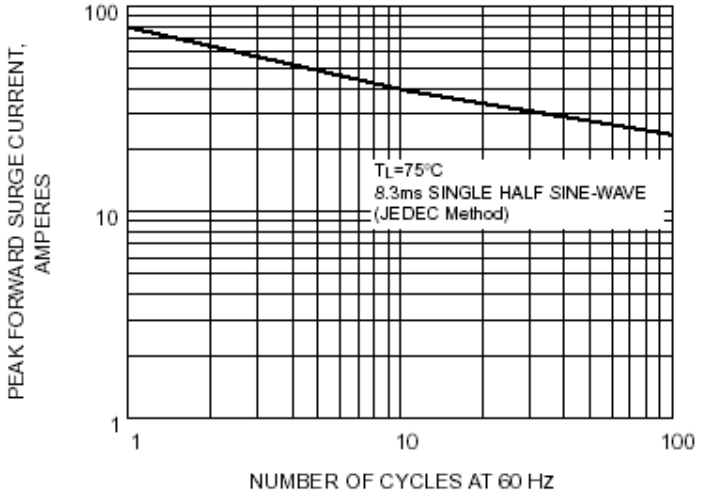

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

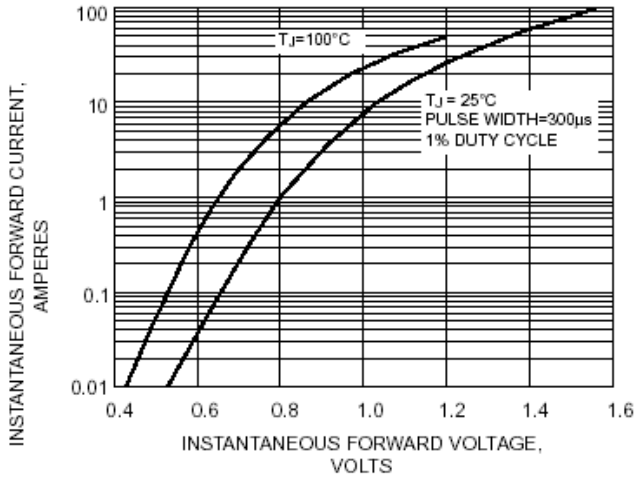

FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

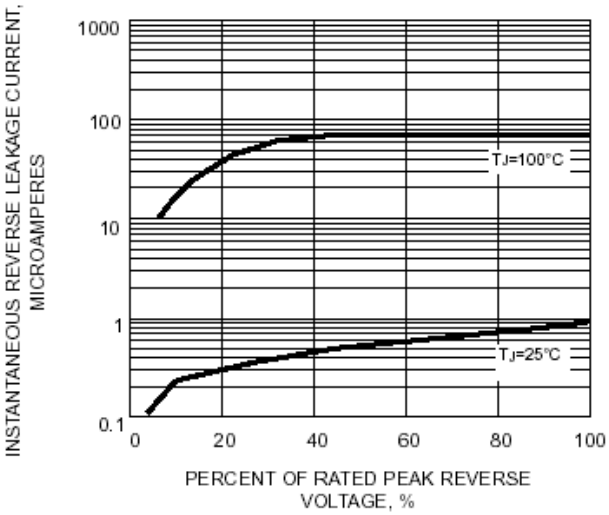

FIG. 5 - REVERSE SWITCHING CHARACTERISTICS

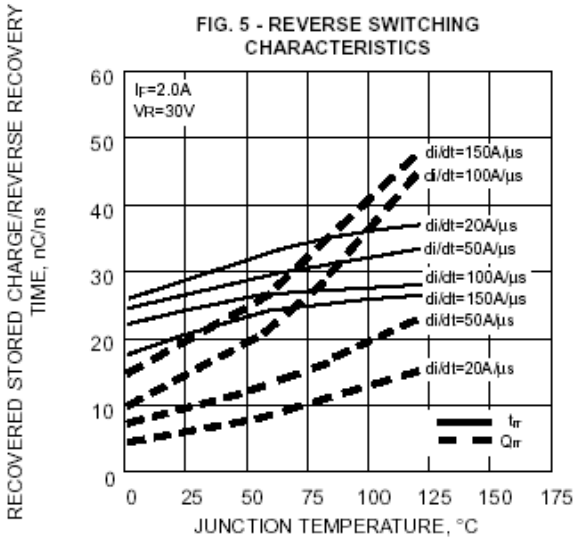

FIG. 6 - TYPICAL JUNCTION CAPACITANCE