

BYV27-1GE THRU BYV27-2GE

GLASS PASSIVATED JUNCTION
ULTRAFAST EFFICIENT SILICON RECTIFIER
VOLTAGE: 100 TO 200V CURRENT: 2.0A

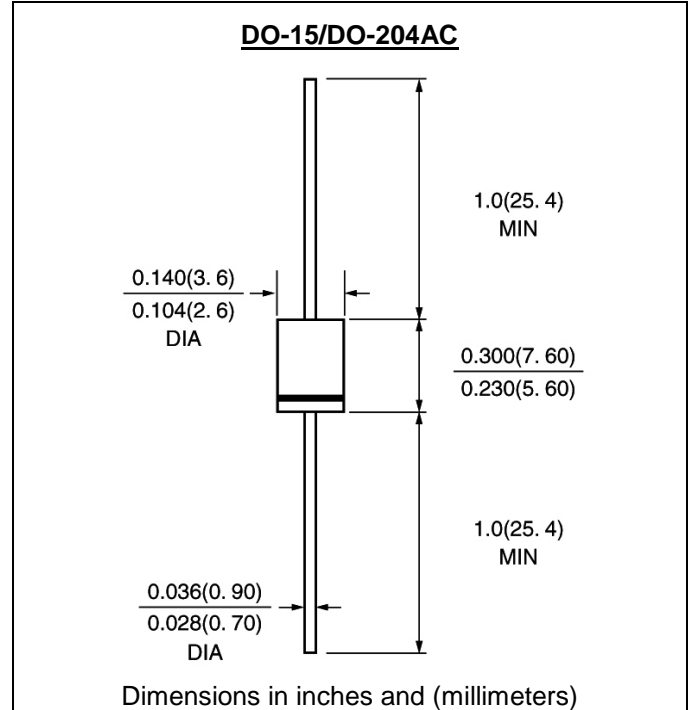


FEATURE

Low power loss
 High surge capability
 Glass passivated chip junction
 Ultra-fast recovery time for high efficiency
 High temperature soldering guaranteed
 250°C/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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYV27-1GE	BYV27-2GE	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	100	200	V
Maximum RMS Voltage	V _{rms}	70	140	V
Maximum DC blocking Voltage	V _{dc}	100	200	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =55°C	I _{f(av)}	2.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	50.0		A
Maximum Forward Voltage at Forward current 2.0A Peak	V _f	0.98		V
non-repetitive peak reverse avalanche energy (Note 1)	E _{rsm}	20		mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	5.0	150.0	μ A μ A
Maximum Reverse Recovery Time (Note 2)	T _{rr}	25		nS
Typical Junction Capacitance (Note 3)	C _j	15		pF
Typical Thermal Resistance (Note 4)	R(ja)	45		°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 BYV27-1GE THRU BYV27-2GE

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVES

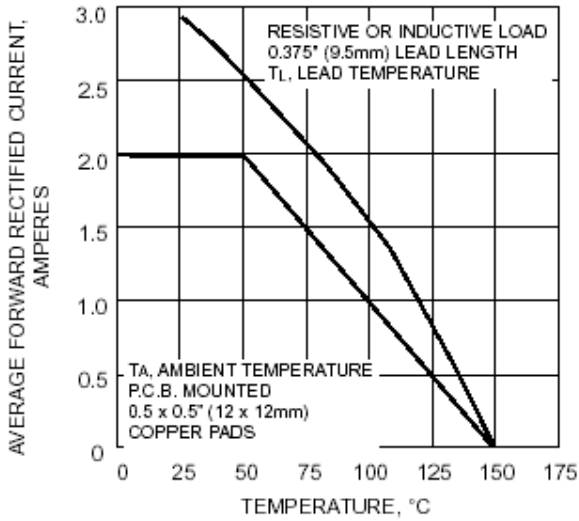


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

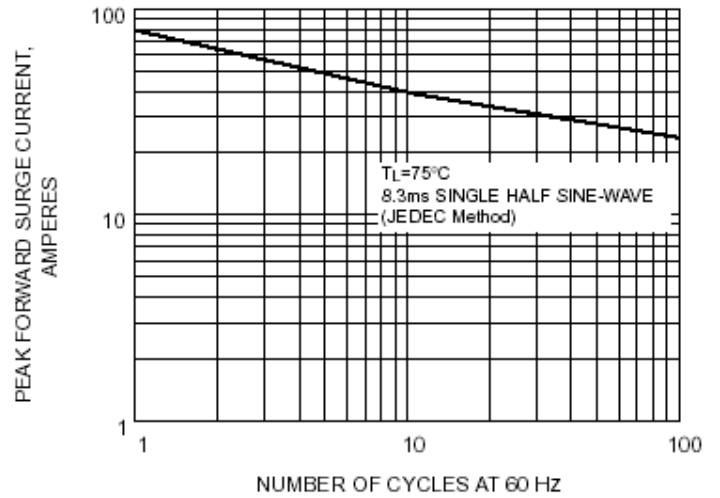


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

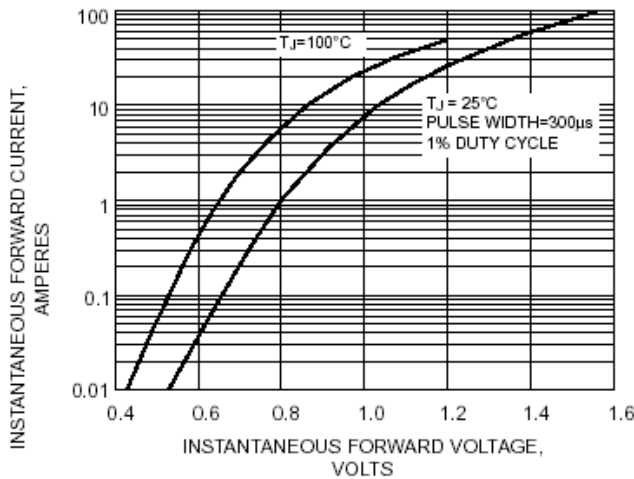


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

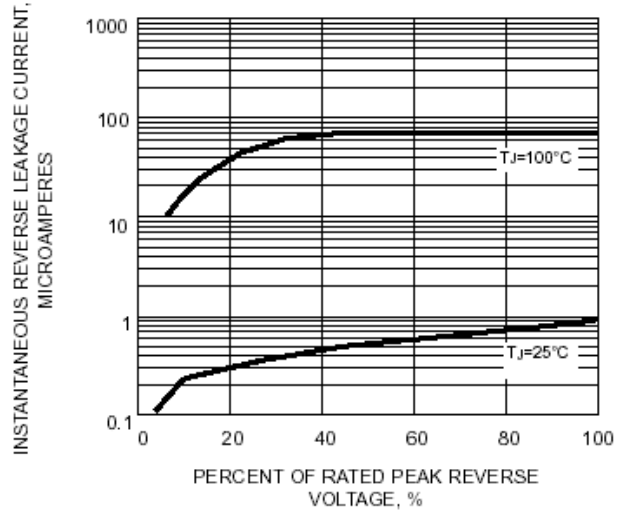


FIG. 5 - REVERSE SWITCHING CHARACTERISTICS

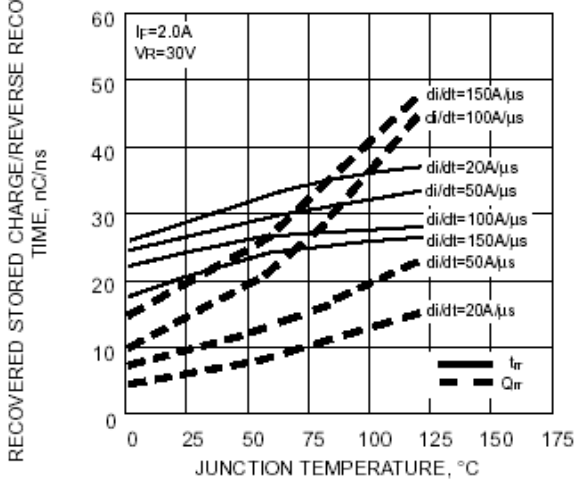


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

