

BYV27-200

GLASS PASSIVATED JUNCTION

ULTRAFAST EFFICIENT SILICON RECTIFIER

VOLTAGE: 200V

CURRENT: 2.0A



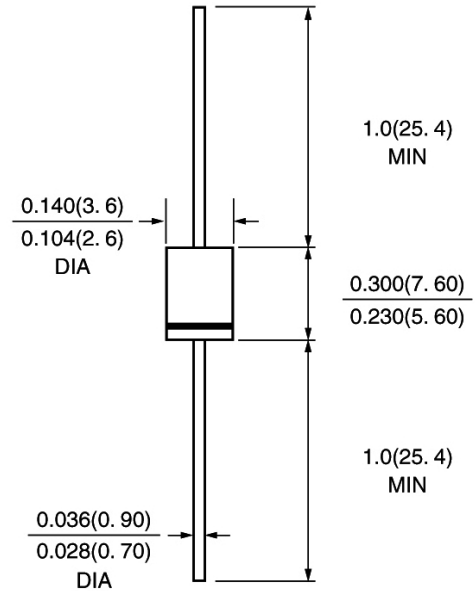
FEATURE

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

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	BYV27-200	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	200	V
Maximum RMS Voltage	V _{rms}	140	V
Maximum DC blocking Voltage	V _{dc}	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 at rated DC blocking voltage Ta =25°C	I _r	5.0	μ A
		150.0	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 4.0V_{dc}

4.Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

RATINGS AND CHARACTERISTIC CURVES BYV27-200

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVES

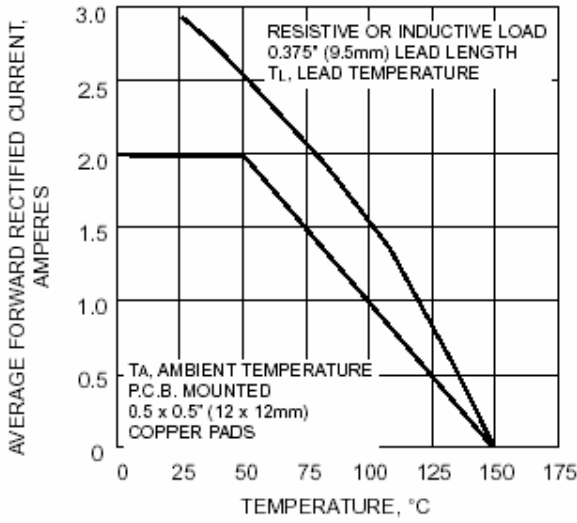


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

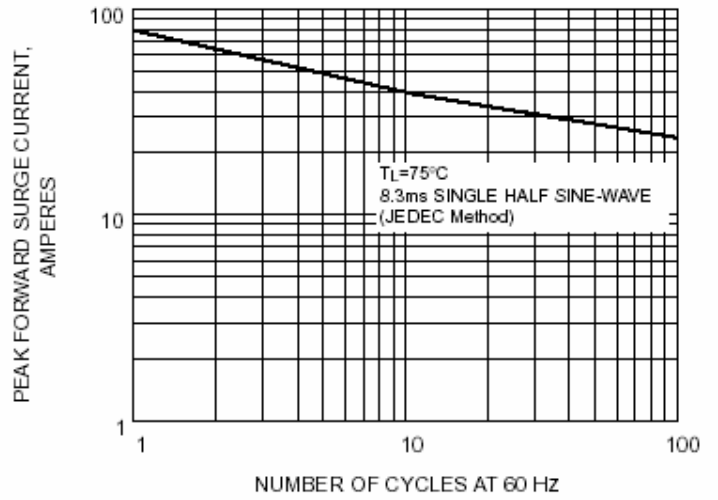


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

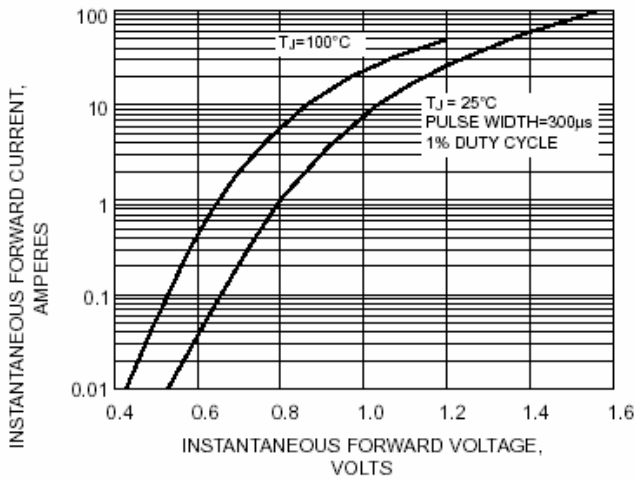


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

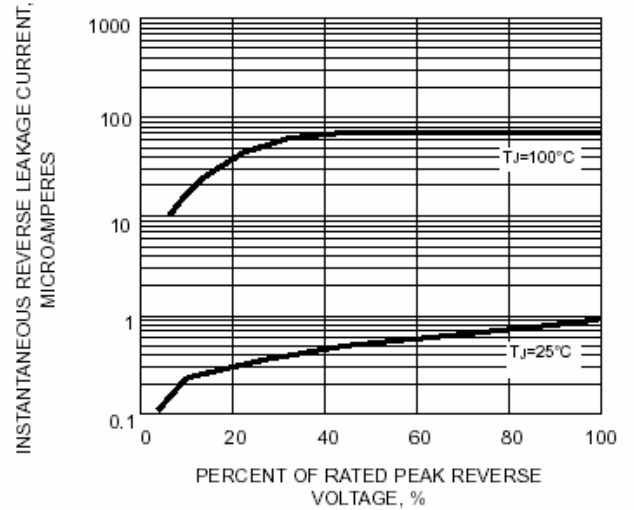


FIG. 5 - REVERSE SWITCHING CHARACTERISTICS

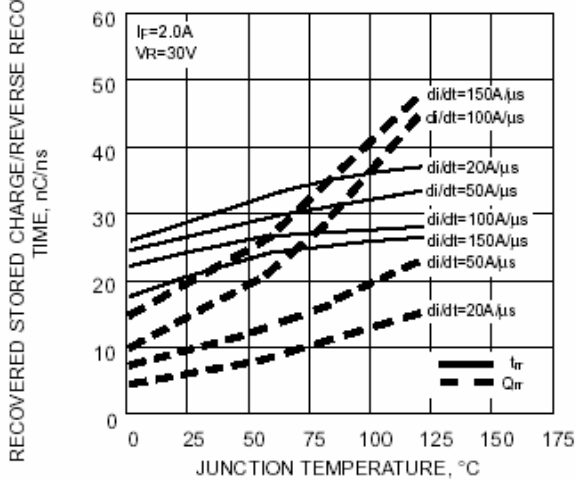


FIG. 6 - TYPICAL JUNCTION CAPACITANCE

