

# BYV27-400

**GLASS PASSIVATED JUNCTION  
ULTRAFAST EFFICIENT SILICON RECTIFIER**  
VOLTAGE: 400V                      CURRENT: 2.0A



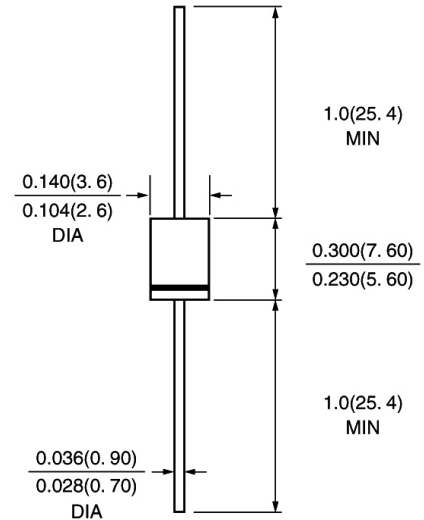
## FEATURE

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	BYV27-400	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	400	V
Maximum RMS Voltage	V <sub>rms</sub>	280	V
Maximum DC blocking Voltage	V <sub>dc</sub>	400	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	I <sub>f(av)</sub>	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	50.0	A
Maximum Forward Voltage at Forward current and 25°C	V <sub>f</sub>	1.05	V
Non-repetitive peak reverse avalanche energy (Note 1)	E <sub>rs</sub>	20	mJ
Maximum DC Reverse Current at rated DC blocking voltage Ta =25°C Ta =125°C	I <sub>r</sub>	5.0 150.0	μA
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	50	nS
Typical Junction Capacitance (Note 3)	C <sub>j</sub>	50	pF
Typical Thermal Resistance (Note 4)	R <sub>th(ja)</sub>	20	°C/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-55 to +150	°C

Note:

1. L = 120 mH; T<sub>j</sub> = T<sub>j</sub> max prior to surge; inductive load switched off.
2. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =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 BYV27-400

