

# BYV29F Series

**PRV : 300 - 400 Volts**  
**Io : 8 Ampere**

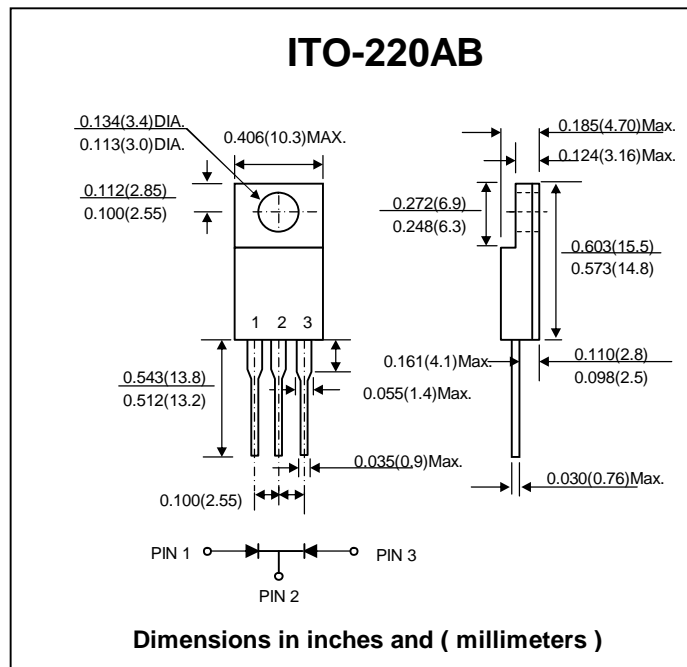
### FEATURES :

- \* Ideally suited for free wheeling diode power factor correction applications
- \* Soft recovery characteristics
- \* Excellent high temperature switching
- \* Glass passivated chip junction
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : Epoxy, Molded
- \* Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds
- \* Polarity: As marked
- \* Mounting Position: Any
- \* Weight : 2.24 grams (Approximately)

## Dual Ultrafast Plastic Rectifiers

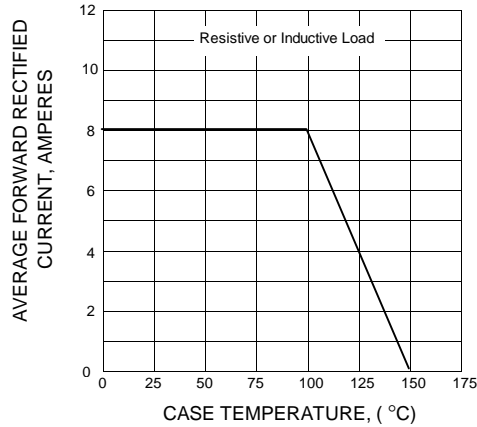


### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>c</sub> = 25°C unless otherwise specified.)

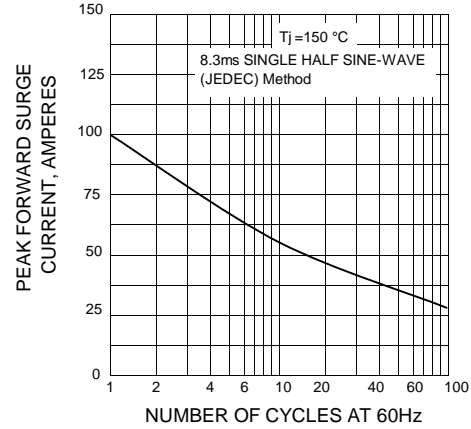
RATING	SYMBOL	BYV29F-300	BYV29F-400	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	300	400	V
Maximum Working Peak Reverse Voltage	V <sub>RWM</sub>	300	400	V
Maximum RMS Voltage	V <sub>RMS</sub>	210	280	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	300	400	V
Maximum Average Forward Current, T <sub>c</sub> = 100°C	I <sub>F(AV)</sub>	8.0		A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	110		A
Maximum Instantaneous Forward Voltage per Leg at I <sub>F</sub> = 8 A, T <sub>j</sub> = 25°C I <sub>F</sub> = 8 A, T <sub>j</sub> = 150°C I <sub>F</sub> = 20 A, T <sub>j</sub> = 25°C	V <sub>F</sub>	1.25 1.03 1.40		V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	I <sub>R</sub> I <sub>R(H)</sub>	10 (T <sub>c</sub> = 25°C) 350 (T <sub>c</sub> = 100°C)		μA
Maximum Reverse Recovery Time per Leg (I <sub>F</sub> = 0.5A, I <sub>R</sub> = 1.0A, I <sub>rr</sub> = 0.25A )	T <sub>rr</sub>	35		ns
Maximum Thermal Resistance, Junction to Case	R <sub>θJC</sub>	5.5		°C/W
Operating storage and temperature range	T <sub>J</sub> , T <sub>STG</sub>	- 40 to + 150		°C

## RATING AND CHARACTERISTIC CURVES ( BYV29F Series )

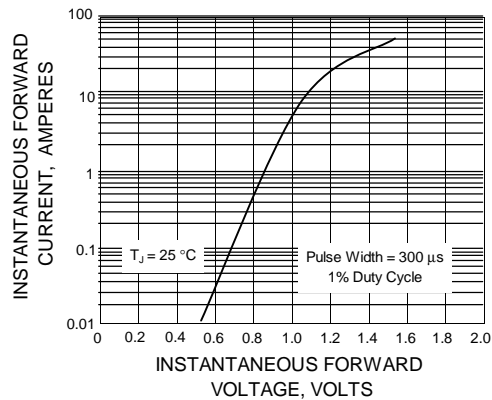
**FIG.1 - MAXIMUM FORWARD CURRENT DERATING CURRENT**



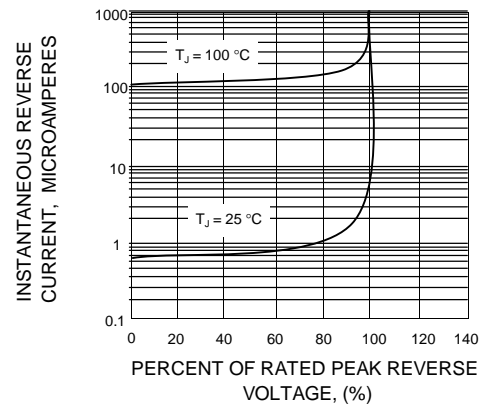
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

