

## BYQ28EF Series

**PRV : 100 - 200 Volts**

**I<sub>o</sub> : 10 Ampere**

### FEATURES :

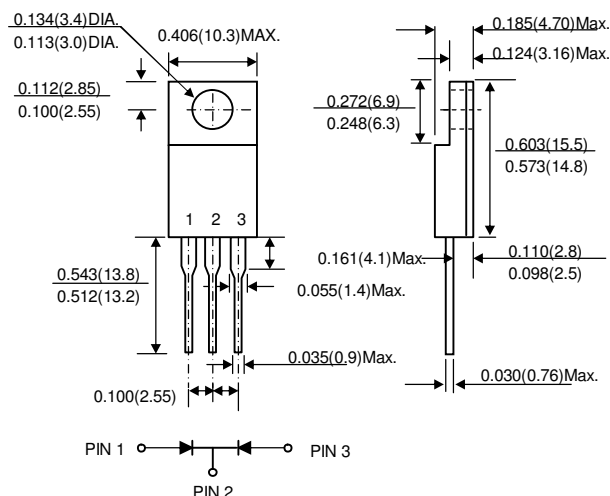
- \* High current capability
- \* High surge current capability
- \* Low leakage, high voltage
- \* Glass passivated chip junction
- \* **Pb / RoHS Free**

### 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

### ITO-220AB



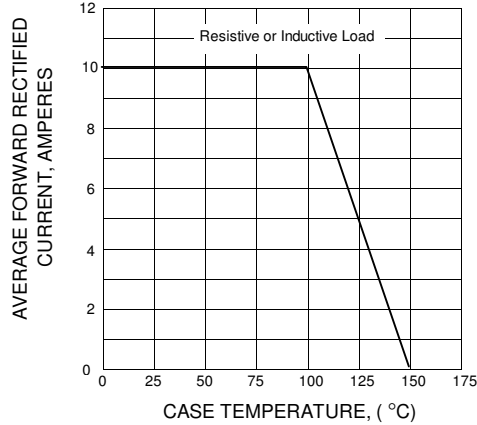
Dimensions in inches and ( millimeters )

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

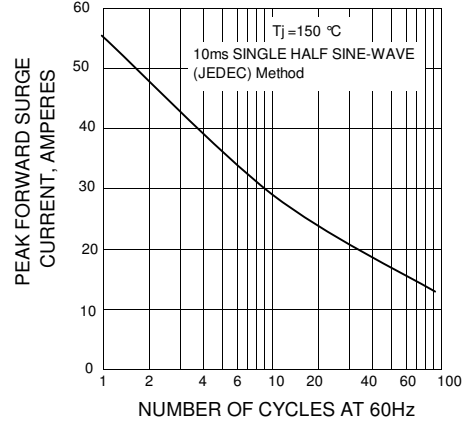
RATING	SYMBOL	BYQ28EF-100	BYQ28EF-150	BYQ28EF-200	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	150	200	V
Maximum Working Peak Reverse Voltage	V <sub>RWM</sub>	100	150	200	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	150	200	V
Maximum Average Forward Current, T <sub>c</sub> = 100°C	I <sub>F(AV)</sub>	10 (Total Device)			A
		5 (Total Device)			
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T <sub>c</sub> = 100°C	I <sub>FSM</sub>	55			A
Maximum Non-repetitive Peak Reverse Current per Leg	I <sub>RSM</sub>	0.2 ( t <sub>p</sub> = 100µs)			A
Maximum Instantaneous Forward Voltage per Leg at I <sub>F</sub> = 10A, T <sub>j</sub> = 25°C I <sub>F</sub> = 5.0A, T <sub>j</sub> = 25°C	V <sub>F</sub>	1.25			V
		1.1			
Maximum Reverse Current per Leg at Working Peak Reverse Voltage	I <sub>R</sub>	10 (T <sub>j</sub> = 25°C)			µA
	I <sub>R(H)</sub>	200 (T <sub>j</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>	20			ns
Typical junction capacitance at 4V, 1MHz	C <sub>j</sub>	85			pF
Maximum Thermal Resistance, Junction to Case	R <sub>θJC</sub>	6.7			°C/W
Operating storage and temperature range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150			°C

## RATING AND CHARACTERISTIC CURVES ( BYQ28EF Series )

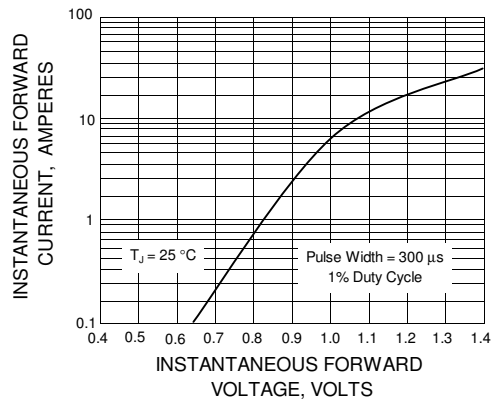
**FIG.1 - FORWARD CURRENT DERATING CURRENT**



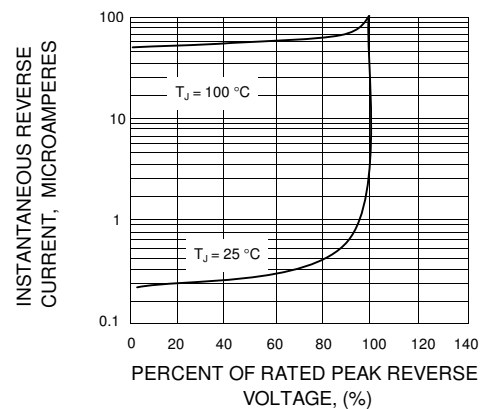
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



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



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG**



**FIG. 5 – TYPICAL JUNCTION CAPACITANCE PER LEG**

