



# EGZ12DCTH THRU EGZ12JCTH

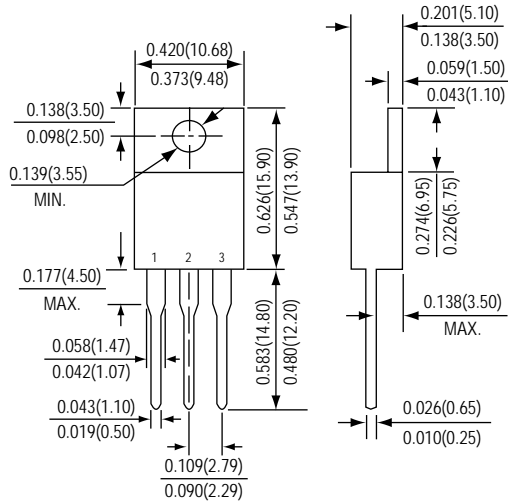
## GLASS PASSIVATED JUNCTION HIGH EFFICIENT RECTIFIERS

Reverse Voltage - 200 to 600 Volts

Forward Current - 12 Amperes

**PATENTED**

**TO-220AB**



\*Dimensions in inches and (millimeters)

**SUPEREX II**™



### FEATURES

- \* GPRC (Glass Passivated Rectifier Chip) inside
- \* Glass passivated cavity-free junction
- \* Halogen-free type
- \* Lead free product, compliance to RoHS
- \* Low forward voltage, high current capability
- \* Low leakage current
- \* High surge current capability
- \* Plastic Material-UL Recognition Flammability Classification 94V-0

### MECHANICAL DATA

**Case :** JEDEC TO-220AB molded plastic body

**Terminals :** Plated Leads, solderable per MIL-STD-750, Method 2026

**Polarity :** Molded on body

**Mounting Position :** Any

**Weight :** 2.24 grams(Approximately)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	EGZ12DCTH	EGZ12GCTH	EGZ12JCTH	UNITS
Maximum repetitive peak reverse voltage	VRRM	200	400	600	Volts
Maximum RMS voltage	VRMS	140	280	420	Volts
Maximum DC blocking voltage	VDC	200	400	600	Volts
Maximum average forward rectified current See Fig. 1	I (AV)	12			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	IFSM	125			Amps
Maximum instantaneous forward voltage at IF = 6 A	VF	1.00	1.25	1.70	Volts
Maximum DC reverse current at rated DC blocking voltage @TA=25	IR	5			uA
Maximum reverse recovery time (NOTE 1)	trr	50		75	nS
Typical junction capacitance (Note 2)	CJ	65			pF
Operating junction and storage temperature range	TJ,TSTG	-65 to +175			

Note : 1. Reverse recovery test condition : IF 0.5A, IR=1.0A, Irr=0.25A  
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V.  
 3. Preliminary draft.

# RATINGS AND CHARACTERISTIC CURVES EGZ12DCTH THRU EGZ12JCTH

FIG.1 - FORWARD CURRENT DERATING CURVE

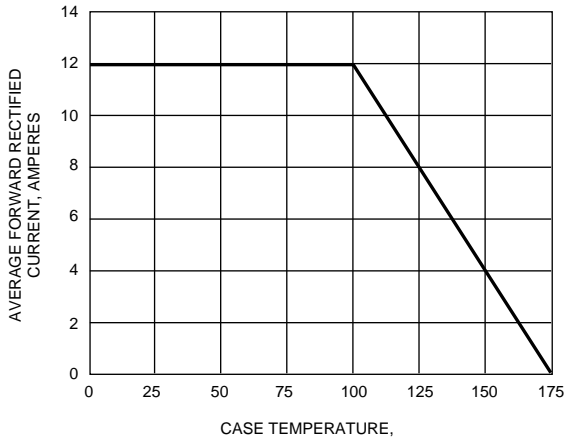


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

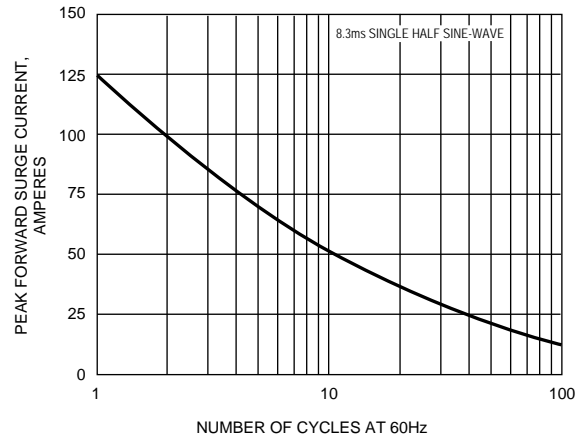


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

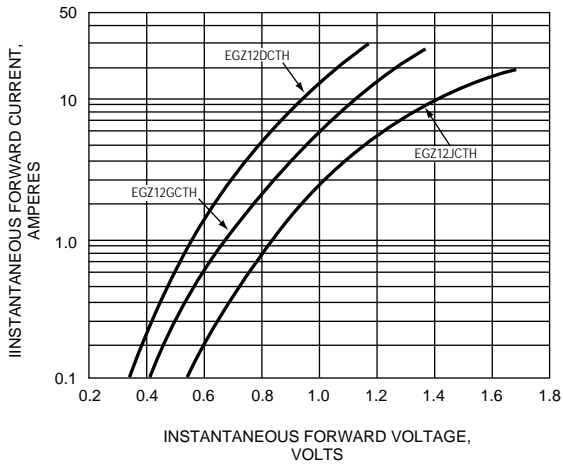


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

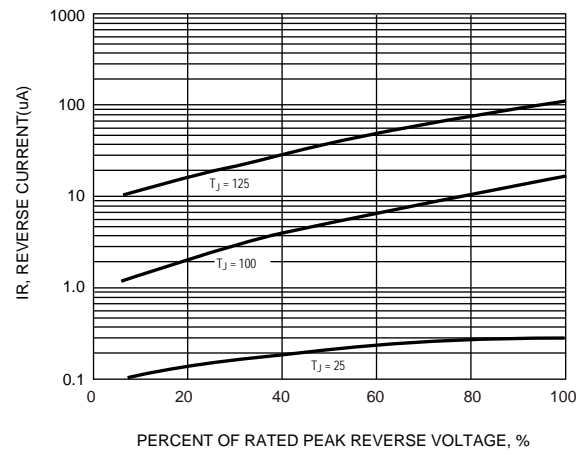


FIG.5 - TYPICAL JUNCTION CAPACITANCE

