



# EGZ12DCFH THRU EGZ12JCFH

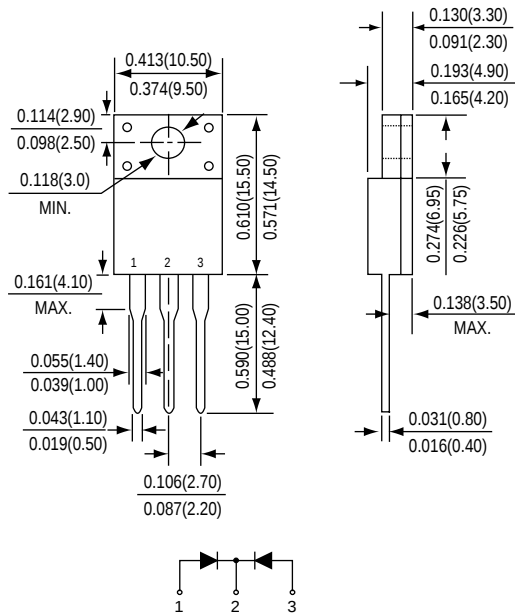
## GLASS PASSIVATED JUNCTION HIGH EFFICIENT RECTIFIERS

Reverse Voltage - 200 to 600 Volts

Forward Current - 12 Amperes

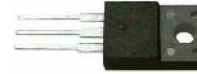
**PATENTED**

ITO-220AB



\*Dimensions in inches and (millimeters)

**SUPEREX II**<sup>TM</sup>



### 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 ITO-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 | EGZ12DCFH   | EGZ12GCFH | EGZ12JCFH | 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 EGZ12DCFH THRU EGZ12JCFH

FIG.1 - FORWARD CURRENT DERATING CURVE

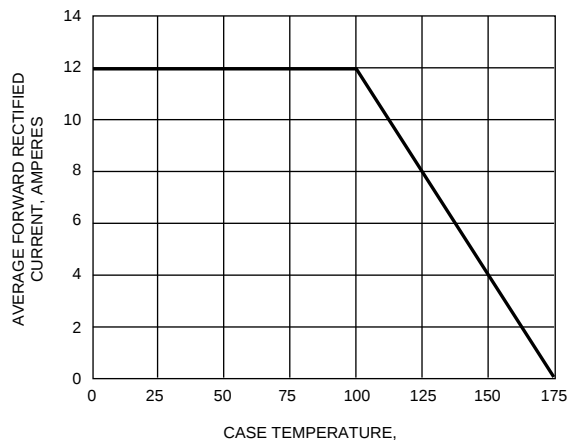


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

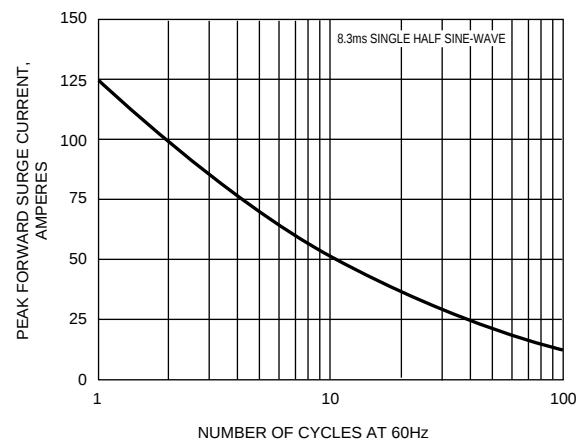


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

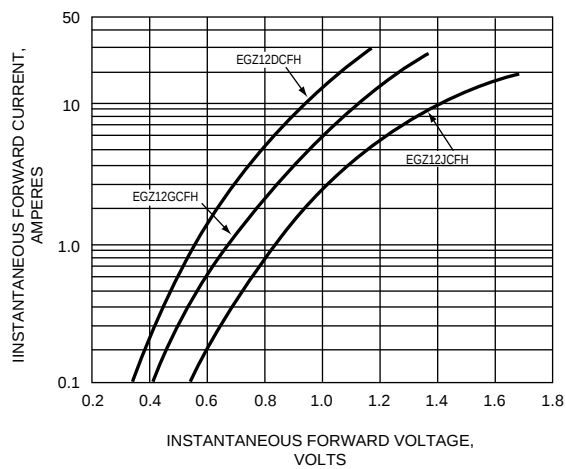


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

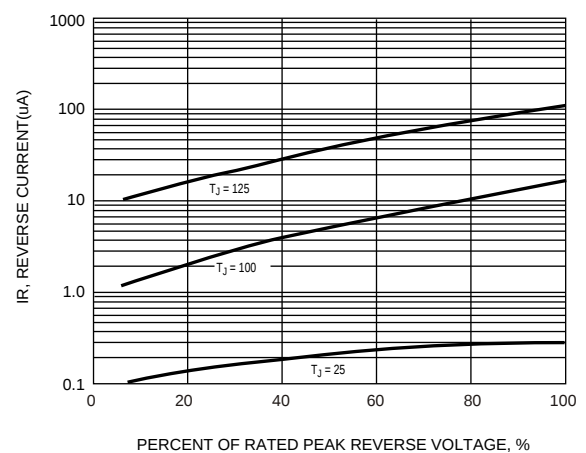


FIG.5 - TYPICAL JUNCTION CAPACITANCE

