



ER800F~ER804F

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 400 Volt **CURRENT** 8 Ampere

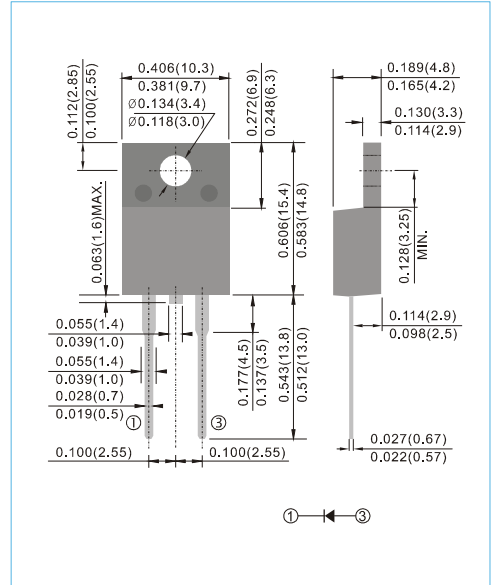
FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: Molded plastic, ITO-220AC
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.055 ounces, 1.56 grams.

ITO-220AC Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load, 60Hz.

| PARAMETER | SYMBOL | ER800F | ER801F | ER801AF | ER802F | ER803F | ER804F | UNITS |
|--|-----------------|-------------|--------|---------|--------|--------|--------|----------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 150 | 200 | 300 | 400 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 105 | 140 | 210 | 280 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 150 | 200 | 300 | 400 | V |
| Maximum Average Forward Current at $T_C=75^\circ C$ | $I_{F(AV)}$ | 8 | | | | | | A |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 125 | | | | | | A |
| Maximum Forward Voltage at 8A (Note 1) | V_F | 0.95 | | | | 1.3 | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^\circ C$ $T_J=100^\circ C$ | I_R | 1 | | | | 300 | | μA |
| Maximum Reverse Recovery Time (Note 1) | t_{rr} | 35 | | | | | | ns |
| Typical Junction Capacitance (Note 2) | C_J | 65 | | | | | | pF |
| Typical Thermal Resistance (Note 3) | $R_{\theta JC}$ | 3 | | | | | | $^\circ C / W$ |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | $^\circ C$ |

NOTES :

1. Pulse Test with PW=300μsec, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions : $I_F=0.5A, I_R=-1A, I_{rr}=-0.25A$
3. Mounted on P.C. Board with 14mm² (0.013mm thick) copper pad areas.



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RATING AND CHARACTERISTIC CURVES

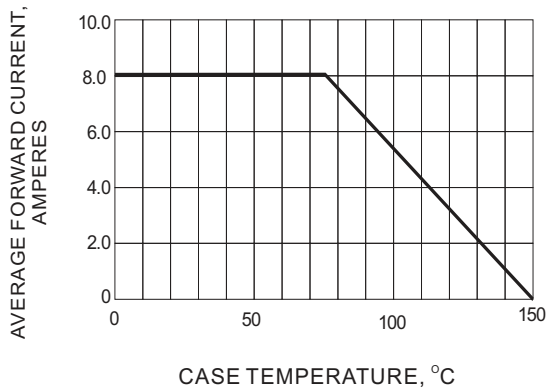


Fig. 1-FORWARD CURRENT DERATING CURVE

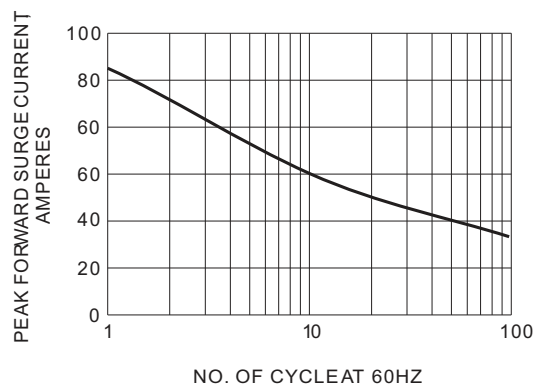


Fig. 2-MAXIMUM NON-REPETITIVE SURGE CURRENT

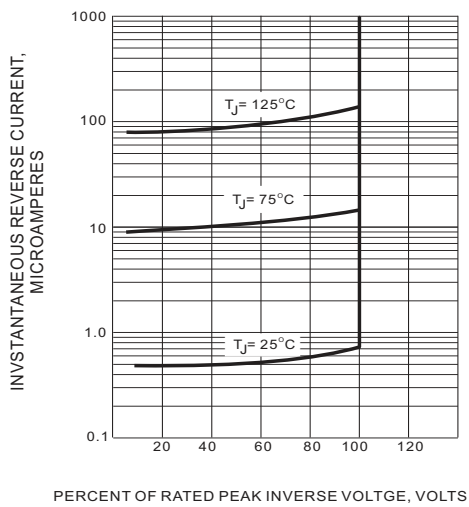


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

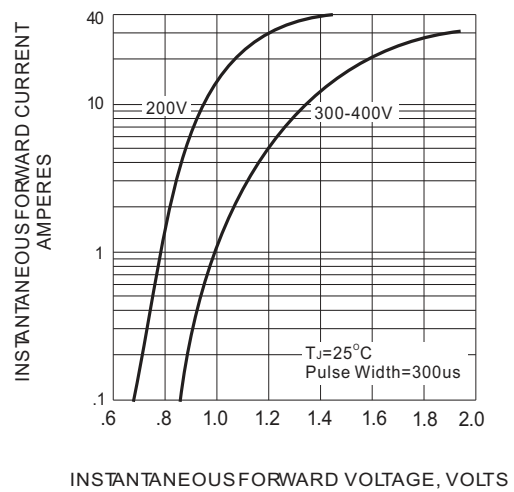


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



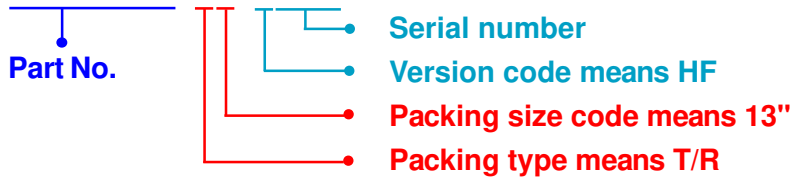
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Part No_packing code_Version

ER800F_T0_00001

For example :

RB500V-40_R2_00001



| Packing Code XX | | | | Version Code XXXXX | | |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code |
| Tape and Ammunition Box (T/B) | A | N/A | 0 | HF | 0 | serial number |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number |
| Bulk Packing (B/P) | B | 13" | 2 | | | |
| Tube Packing (T/P) | T | 26mm | X | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | |



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