

ER1000F - ER1006F

10A ISOLATION SUPER-FAST GLASS PASSIVATED RECTIFIER

Features

- Glass Passivated Die Construction
- Super-Fast Switching for High Efficiency
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-O

Mechanical Data

Case: ITO-220A Full Molded Plastic

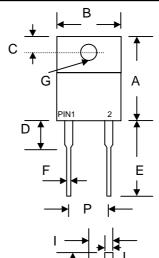
Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208 Polarity: See Diagram

Weight: 2.24 grams (approx.)

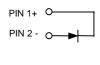
Mounting Position: Any

Marking: Type Number



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| ITO-220A | | | | | |
|----------------------|--------|--------|--|--|--|
| Dim | Min | Max | | | |
| Α | 14.9 | 15.1 | | | |
| В | _ | 10.5 | | | |
| С | 2.62 | 2.87 | | | |
| D | 3.56 | 4.06 | | | |
| Е | 13.46 | 14.22 | | | |
| F | 0.68 | 0.94 | | | |
| G | 3.74 Ø | 3.91 Ø | | | |
| Н | 5.84 | 6.86 | | | |
| I | 4.44 | 4.70 | | | |
| J | 2.54 | 2.79 | | | |
| K | 0.35 | 0.64 | | | |
| L | 1.14 | 1.40 | | | |
| Р | 4.95 | 5.20 | | | |
| All Dimensions in mm | | | | | |



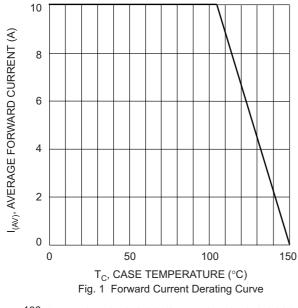
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

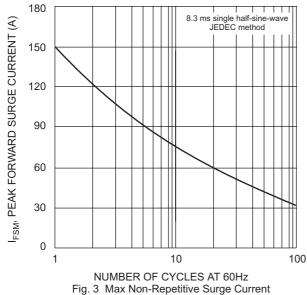
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

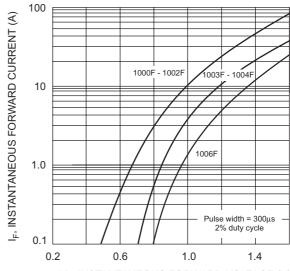
| Characteristic | | Symbol | ER 1000F | ER 1001F | ER 1001AF | ER 1002F | ER 1003F | ER 1004F | ER 1006F | Unit |
|---|---|--------------------|--------------|-------------|--------------|-------------|-------------|-------------|-------------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | | Vrrm Vrwm Vr | 50 | 100 | 150 | 200 | 300 | 400 | 600 | V |
| RMS Reverse Voltage | | VR(RMS) | 35 | 70 | 105 | 140 | 210 | 280 | 420 | V |
| Average Rectified Output Current | @T _C = 105°C | lo | | | | 10 | | | | Α |
| Non-Repetitive Peak Forward Surg- Single half sine-wave superimposed (JEDEC Method) | | İFSM | | | | 150 | | | | А |
| Forward Voltage | @I _F = 10A | VFM | 0.95 1.3 1.7 | | | 1.7 | V | | | |
| Peak Reverse Current At Rated DC Blocking Voltage | @T _A = 25°C @T _A = 100°C | IRM | 10 500 | | | | μΑ | | | |
| Reverse Recovery Time (Note 1) | | trr | | 3 | 35 | | | 50 | | nS |
| Typical Junction Capacitance (Note | 2) | Cj | | 7 | 0 | | | 50 | | pF |
| Operating and Storage Temperature | e Range | Тj, Tsтg | | | -(| 65 to +15 | 0 | | | °C |

Note: 1. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A.

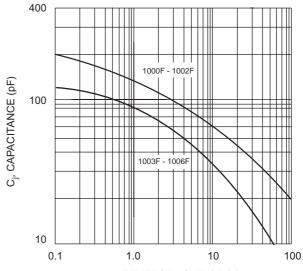
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.







V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



V_R, REVERSE VOLTAGE (V) Fig. 4 Typical Junction Capacitance

ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| ER1000F | ITO-220A | 50 Units/Tube |
| ER1001F | ITO-220A | 50 Units/Tube |
| ER1001AF | ITO-220A | 50 Units/Tube |
| ER1002F | ITO-220A | 50 Units/Tube |
| ER1003F | ITO-220A | 50 Units/Tube |
| ER1004F | ITO-220A | 50 Units/Tube |
| ER1006F | ITO-220A | 50 Units/Tube |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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