ER1000F THRU ER1004F

ISOLATION SUPERFAST RECOVERY RECTIFIERS VOLTAGE - 50 to 400 Volts CURRENT - 10.0 Amperes

FEATURES

Plastic package has Underwriters Laboratory

Flammability Classification 94V-O utilizing

Flame Retardant Epoxy Molding Compound

- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency
- Low forward voltage, high current capability
- High surge capacity
- Super fast recovery times, high voltage
- Epitaxial chip construction

MECHANICAL DATA

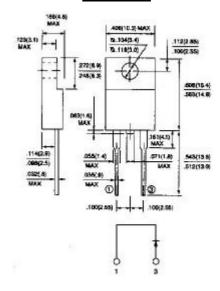
Case: ITO-220AC full molded plastic package

Terminals: Leads, solderable per MIL-STD-202, Method 208

Polarity: As marked Mounting Position: Any

Weight: 0.08 ounces, 2.24 grams

ITO-220AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, Resistive or inductive load.

For capacitive load, derate current by 20%.

	ER1000F	ER1001F	ER1001AF	ER1002F	ER1003F	ER1004F	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	150	200	300	400	V
Maximum RMS Voltage	35	70	105	140	210	320	V
Maximum DC Blocking Voltage	50	100	150	200	300	400	V
Maximum Average Forward Rectified Current at T _C =100	10.0						Α
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	150						A
Maximum Forward Voltage at 10.0A per element	0.95 1.30						V
Maximum DC Reverse Current at Rated T _a =25 DC Blocking Voltage per element T _a =125	10 500						Α
Typical Junction capacitance (Note 1)	62						₽F
Maximum Reverse Recovery Time(Note 2)	35 50					0	ns
Typical Thermal Resistance(Note 3) R JC	3.0						/W
Operating and Storage Temperature Range T _J	-55 to +150						

NOTES:

- 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
- 2. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, Irr=.25A

Thermal resistance junction to CASE RATING AND CHARACTERISTIC CURVES ER1000F THRU ER1004F

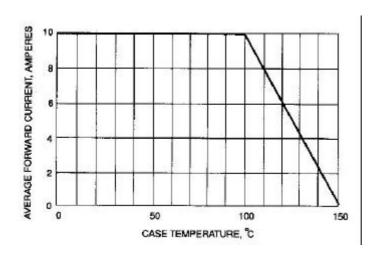


Fig. 1-FORWARD CURRENT DERATING CURVE

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

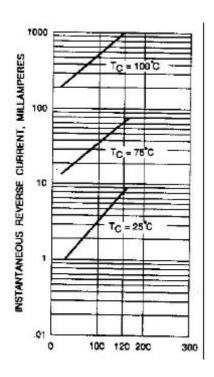


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

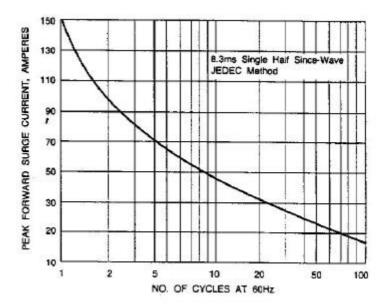


Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

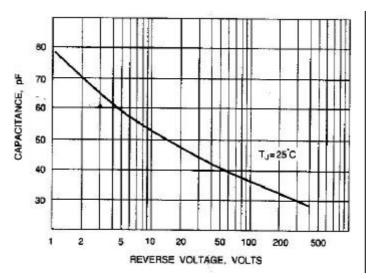


Fig. 5-TYPICAL JUNCTION CAPACITANCE