ER1000FCT THRU ER1004FCT

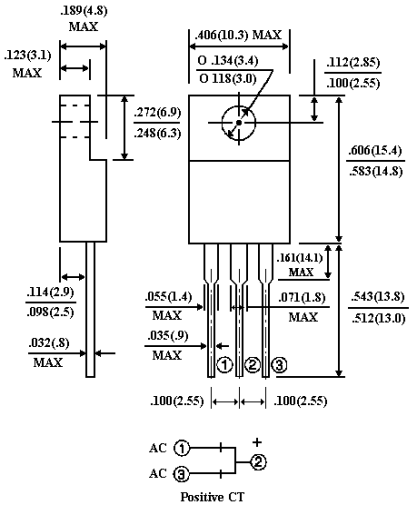
ISOLATION SUPERFAST RECOVERY RECTIFIERS

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

ITO-220AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: ITO-220AB 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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, Resistive or inductive load.
For capacitive load, derate current by 20%.

	ER1000FCT	ER1001FCT	ER1001AFCT	ER1002FCT	ER1003FCT	ER1004FCT	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 ¢J	10.0						A
Peak Forward Surge Current, 8.3ms single half sine-Wave superimposed on rated load(JEDEC method)	150						A
Maximum Forward Voltage at 5.0A per element	0.95				1.30		V
Maximum DC Reverse Current at Rated T_C=25 ¢J DC Blocking Voltage per element T_C=100 ¢J	5 500						£g A
Typical Junction capacitance (Note 1)	42						pF
Maximum Reverse Recovery Time(Note 2)	35				50		ns
Typical Thermal Resistance(Note 3) R £KJC	3.0						¢J/W
Operating and Storage Temperature Range T_J	-55 to +150						¢J

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
3. Thermal resistance junction to CASE

RATING AND CHARACTERISTIC CURVES
ER1000FCT THRU ER1004FCT

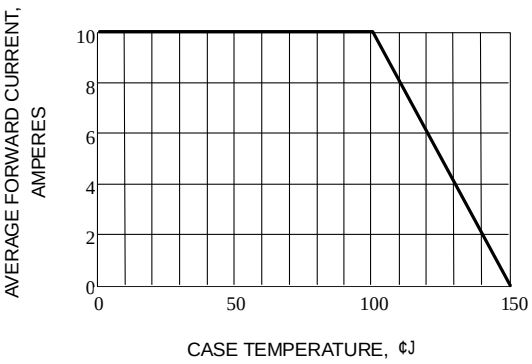


Fig. 1-FORWARD CURRENT DERATING CURVE

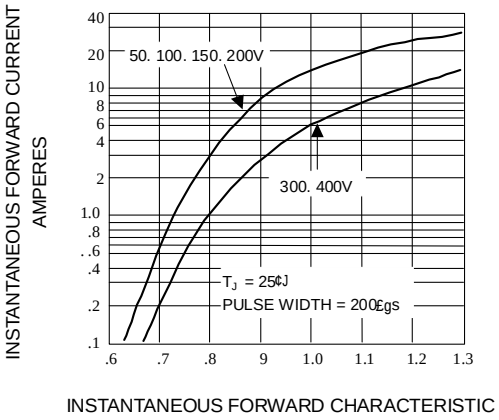


Fig. 2-TYPICAL INSTNATANEOUS FORWARD CHARACTERISTIC

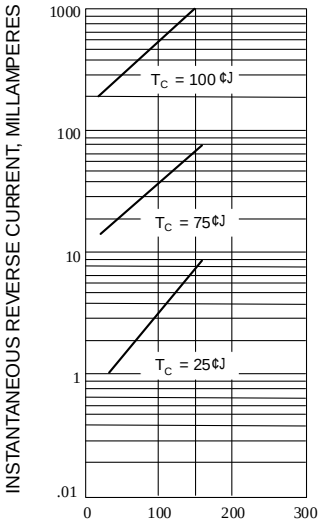


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

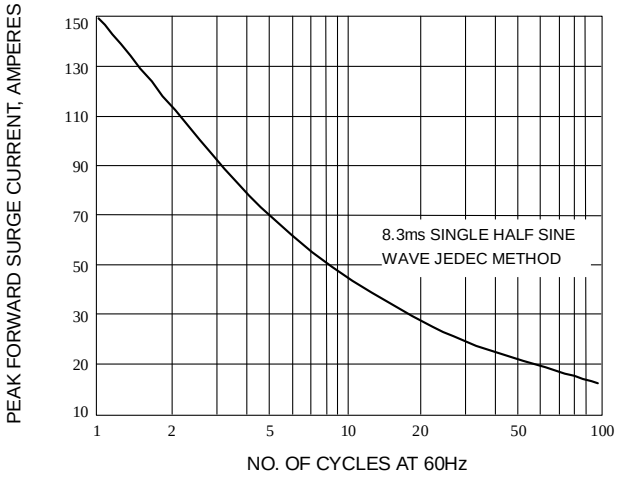


Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

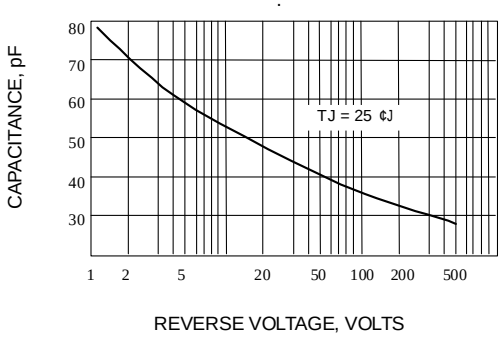


Fig. 5-TYPICAL JUNCTION CAPACITANCE