PANJIT SEMI CONDUCTOR

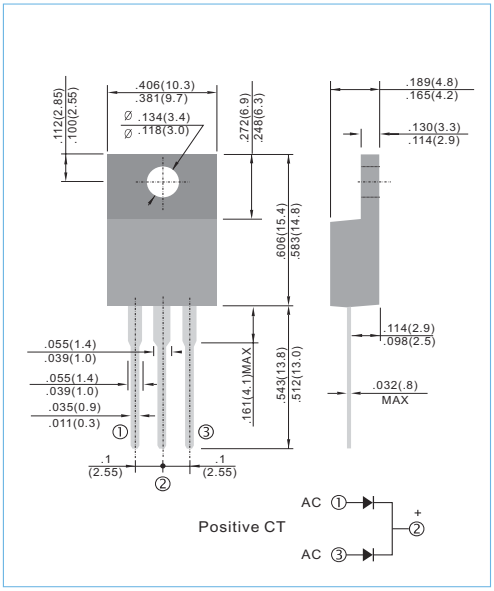
DATA SHEET

ER1000FCT~ER1004FCT

ISOLATION SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 400 Volts **CURRENT** 10 Amperes

ITO-220AB Unit : inch (mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forwrd voltge, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICALDATA

Case: ITO-220AB Molded plastic

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

Polarity: As marked.

Standard packaging: Any

Weight: 0.08 ounces, 2.24grams.

MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	ER1000FCT	ER1001FCT	ER1001AFCT	ER1002FCT	ER1003FCT	ER1004FCT	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 .375"(9.5mm) lead length at Tc =100°C	I_{AV}	10.0						A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	150						A
Maximum Forward Voltage at 5A, per element	V_F	0.95				1.30		V
Maximum DC Reverse Current at TA=25°C Rated DC Blocking VoltageTA=100°C	I_R	10 500						uA
Maximum Reverse Recovery Time (Note 2)	T_{RR}	35				50		ns
Typical Junction capacitance (Note 1)	C_J	62						pF
Maximum Thermal Resistance	RθJC	3.0						°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-50 TO +150						°C

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. Both Bonding and Chip structure are available.

RATING AND CHARACTERISTIC CURVES

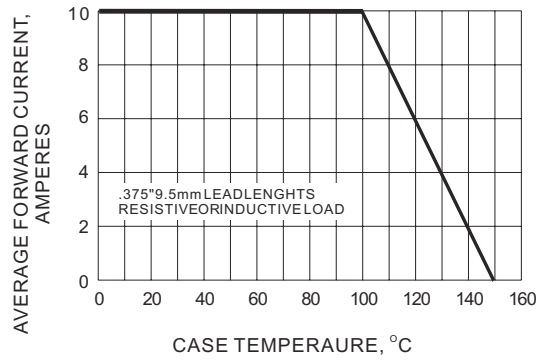


Fig.1- FORWARD CURRENT DERATING CURVE

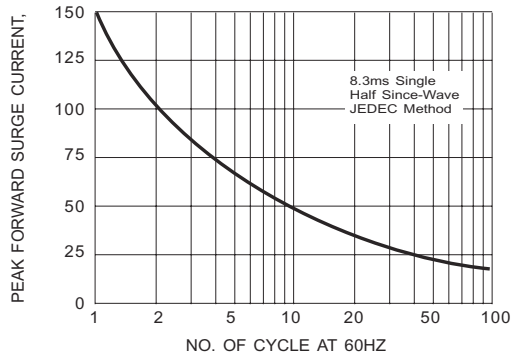


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

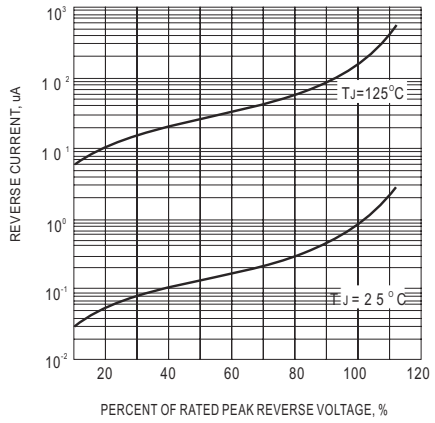


Fig.3- TYPICAL REVERSE CHARACTERISTIC

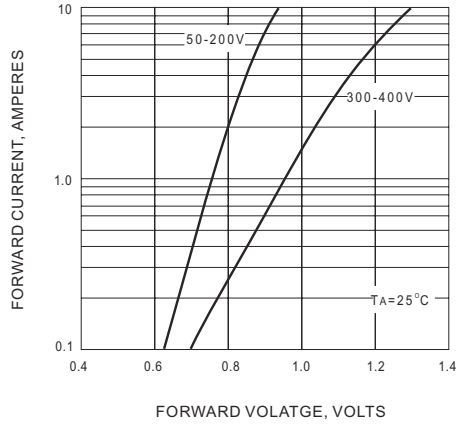


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC