## ER1000FCT~ER1006FCT

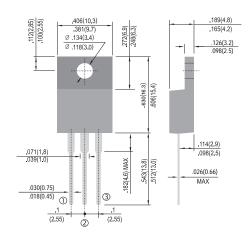
#### SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 600 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 forward voltage, high current capability
- · High surge capacity.
- Super fast recovery times, high voltage.
- Lead free in comply with EU RoHS 2002/95/EC directives

#### **MECHANICAL DATA**

- Case: ITO-220AB Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- · Polarity: As marked.
- · Standard packaging: Any



#### 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	ER1006FCT	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	300	400	600	V
Maximum Average Forward Current at Tc =100°C	I <sub>F(AV)</sub>	10.0							А
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	150							А
Maximum Forward Voltage at 5A, per element	V <sub>F</sub>	0.95 1.30 1.7					V		
Maximum DC Reverse Current at T <sub>,j</sub> =25°C Rated DC Blocking VoltageT <sub>,j</sub> =100°C	I <sub>R</sub>	5.0 500							μА
Maximum Reverse Recovery Time (Note 2)	t <sub>rr</sub>	35							ns
Typical Junction capacitance (Note 1)	C	62							pF
Typical Thermal Resistance	R <sub>eJC</sub>	3.0							°C /
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150							°C

#### NOTES:

- 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2. Reverse Recovery Test Conditions: IF=.5A, IR=1A, Irr=.25A.
- 3. Both Bonding and Chip structure are available.

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300-400V

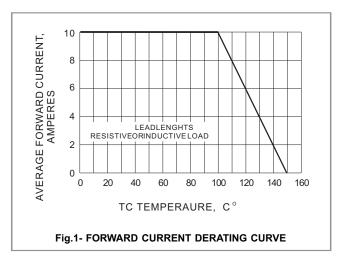
1.8 2.0

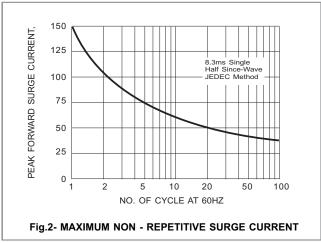
600

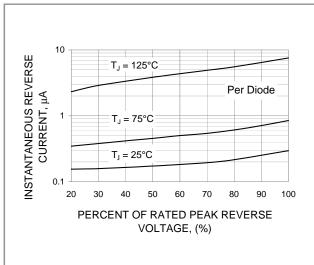
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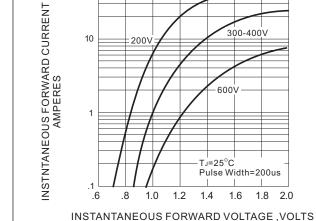
# ER1000FCT~ER1006FCT

### **RATING AND CHARACTERISTIC CURVES**









10

1

200\

Fig.3- TYPICAL REVERSE CHARACTERISTIC

Fig.4- TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTIC

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