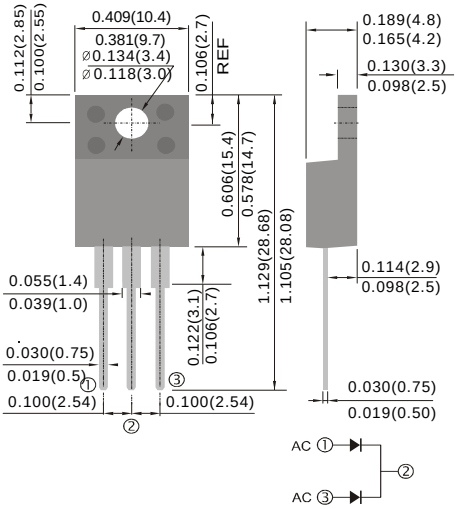
ER1006FCT

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 600 Volt **CURRENT** 10 Ampere

ITO-220AB Unit : inch(mm)



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltge, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

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	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Current at T_C =100°C	$I_{F(AV)}$	10	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50	A
Maximum Forward Voltage at 5A, per element	V_F	1.6	V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C T_J=125°C	I_R	10 100	μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35	ns
Typical Thermal Resistance	$R_{\theta JC}$	4	°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +175	°C

NOTES

1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, Irr=0.25A.
2. Both Bonding and Chip structure are available.

TYPICAL CHARACTERISTIC CURVES

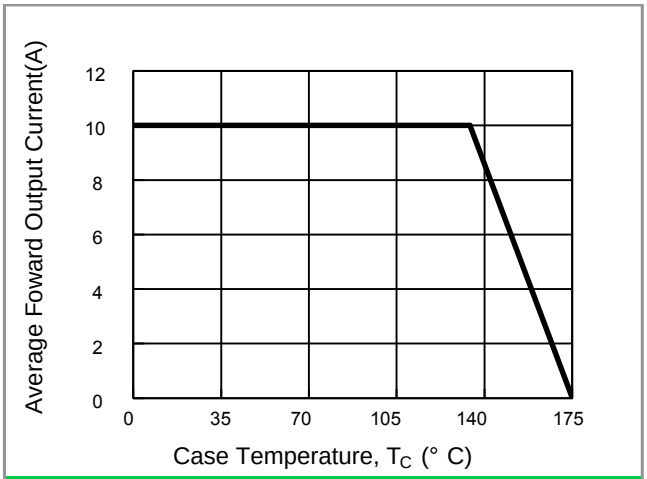


Fig.1 Forward Current Derating Curve

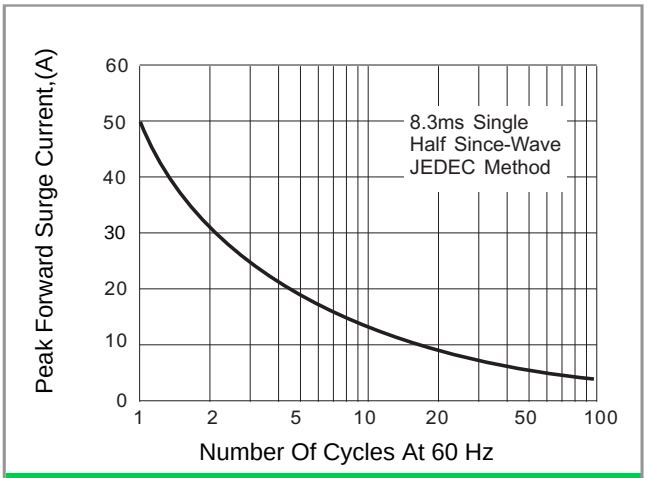


Fig.2 Maximum Non-Repetitive Surge Current

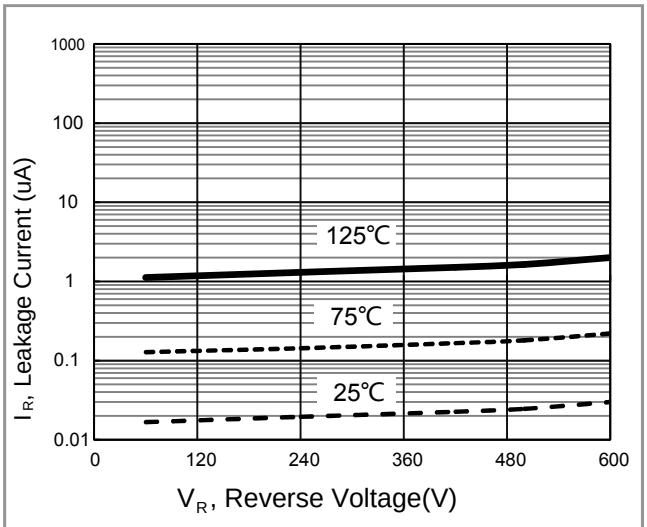


Fig.3 Typical Reverse Characteristics

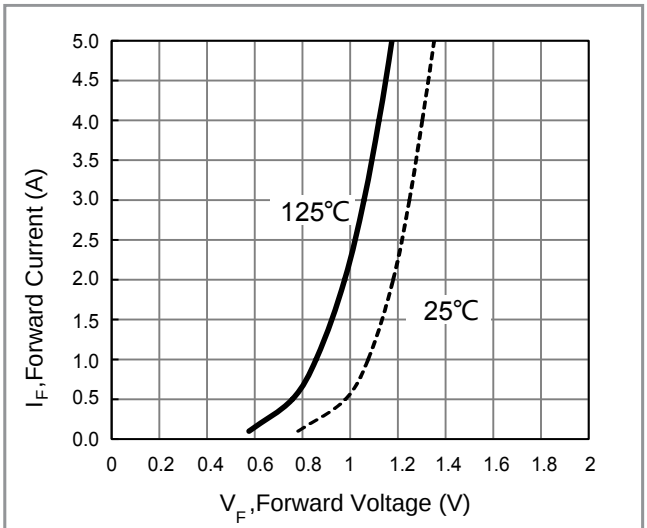


Fig.4 Typical Forward Characteristics