



DATA SHEET

ER800F~ER804F

ISOLATION SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 400 Volts **CURRENT** 8.0 Amperes

ITO-220AC

Unit : inch (mm)

FEATURES

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Exceeds environmental standards of MIL-S-19500/228.
- Hermetically sealed.
- Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive reques

MECHANICAL DATA

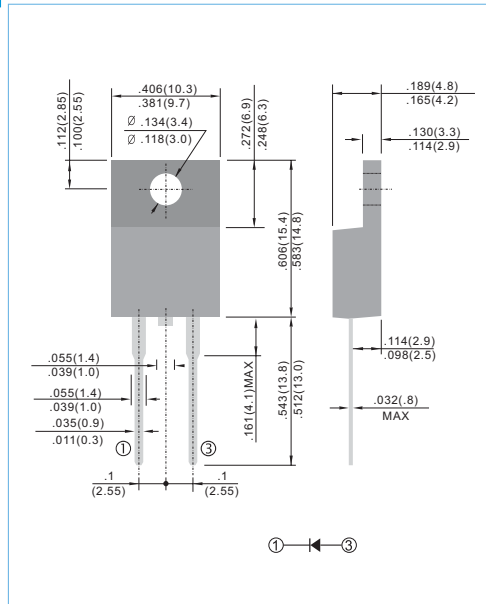
Case: ITO-220AC molded plastic package

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

Polarity: As marked.

Mounting Position: Any

Weight: 0.08 ounces, 2.24 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	ER800F	ER801F	ER801AF	ER802F	ER803F	ER804F	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 T _C =100°C	I _{AV}	8.0						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	125						A
Maximum Forward Voltage at 8.0A	V _F	0.95			1.30			V
Maximum DC Reverse Current T _C =25°C at Rated DC Blocking Voltage T _C =125°C	I _R	10			300			uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}	35			50			ns
Typical Junction capacitance (Note 2)	C _J	62						pF
Typical Junction Resistance (Note 3)	R _{θJC}	3.0						°C / W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 TO +150						°C

NOTES:

1. Pulse Test with PW=300 usec, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
3. Mounted on P.C. Board with 14mm² (.013mm thick) copper pad areas.



RATING AND CHARACTERISTIC CURVES

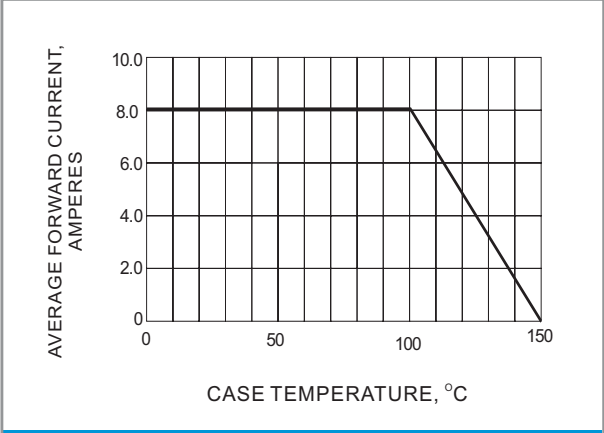


Fig.1- FORWARD CURRENT DERATING CURVE

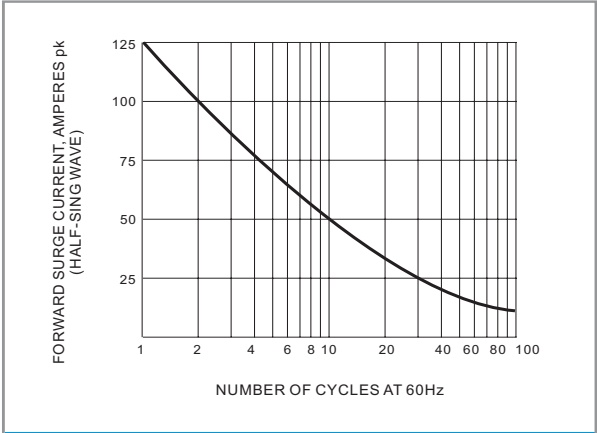


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

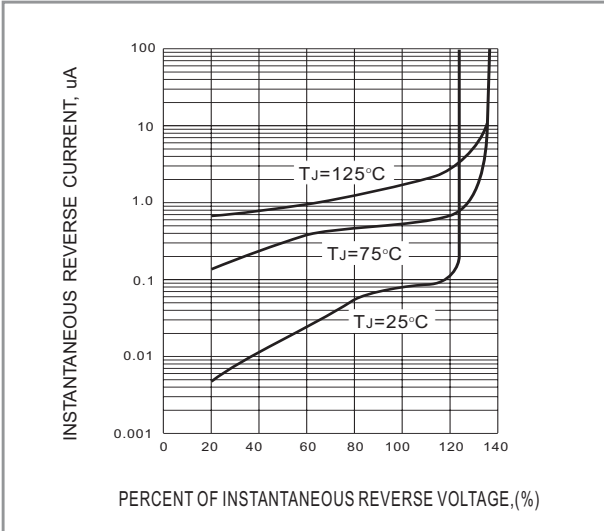


Fig.3- TYPICAL REVERSE CHARACTERISTICS

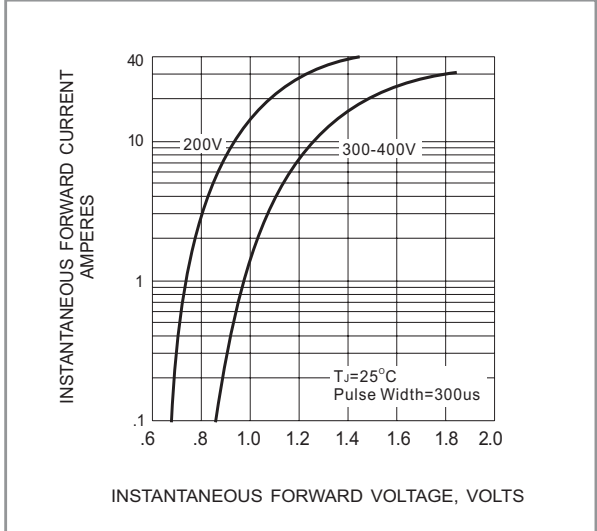


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS