

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

MECHANICALDATA

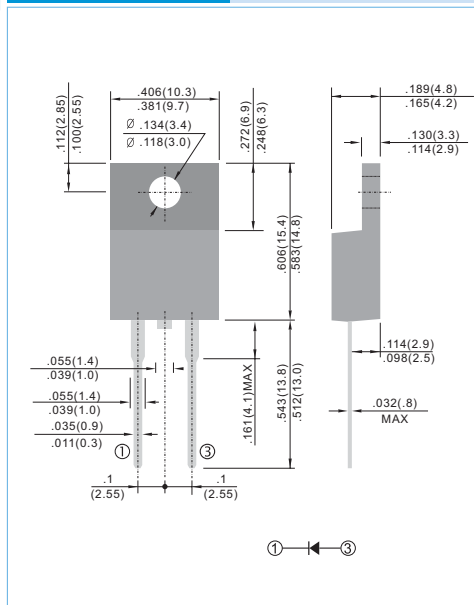
Case: ITO-220AC molded plastic package

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 Tc=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 Tc=25°C at Rated DC Blocking Voltage Tc=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)	$R_{\theta JC}$	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

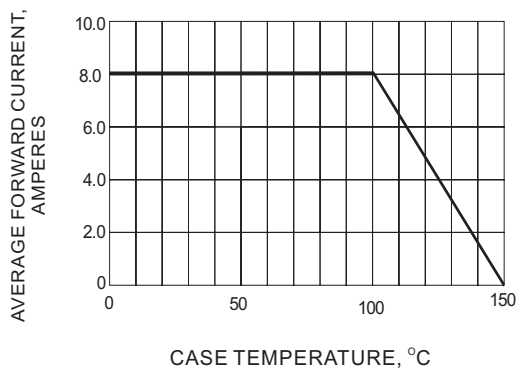


Fig.1- FORWARD CURRENT DERATING CURVE

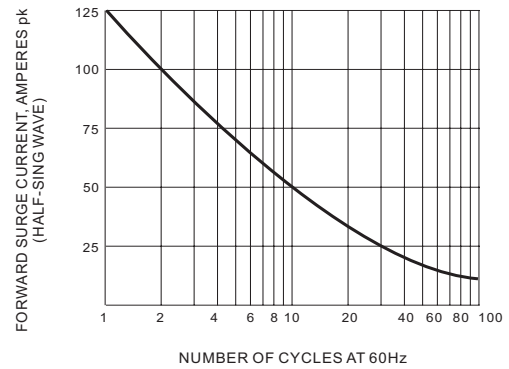


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

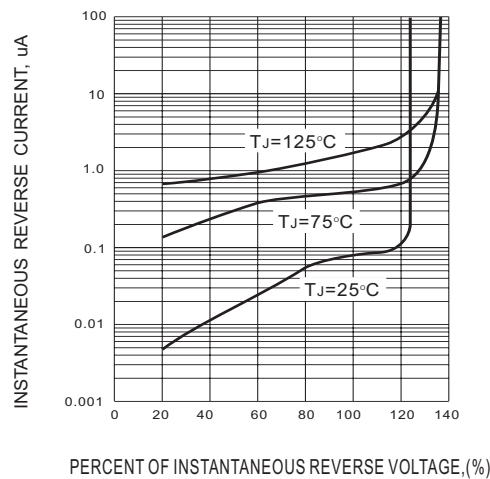


Fig.3- TYPICAL REVERSE CHARACTERISTICS

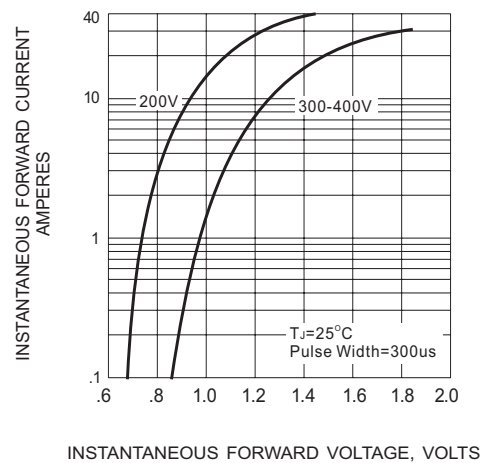


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS