



### SUPERFAST RECOVERY RECTIFIERS

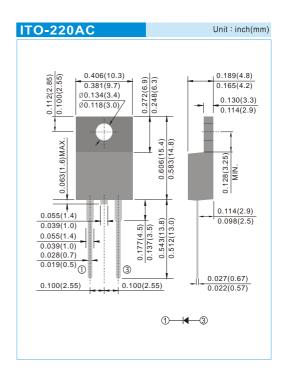
VOLTAGE 50 to 400 Volt CURRENT 8 Ampere

#### **FEATURES**

- Superfast recovery times-epitaxial construction.
- Low forward voltage, high current capability.
- Hermetically sealed.
- · Low leakage.
- High surge capability.
- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Lead free in compliance with EU RoHS 2011/65/EU directive

### **MECHANICAL DATA**

- Case: Molded plastic, ITO-220AC
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- · Polarity: As marking
- Weight: 0.055 ounces, 1.5615 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	٧
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	٧
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	300	400	V
Maximum Average Forward Current at T <sub>c</sub> =75°C	I <sub>F(AV)</sub>	8					А	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	125						A
Maximum Forward Voltage at 8A (Note 1)	V <sub>F</sub>	0.95			.3	V		
Maximum DC Reverse Current at Rated DC Blocking $T_J$ =25°C Voltage $T_J$ =100°C	I <sub>R</sub>	1 300					μА	
Maximum Reverse Recovery Time (Note 1)	t <sub>rr</sub>	35					ns	
Typical Junction Capacitance (Note 2)	CJ	65					pF	
Typical Thermal Resistance (Note 3)	$R_{_{\theta JC}}$	3				°C / W		
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150				°C		

#### NOTES:

- 1. Pulse Test with PW=300µsec, 2% Duty Cycle.
- 2. Reverse Recovery Tset Conditions: I<sub>F</sub>=0.5A,I<sub>R</sub>=1A,Irr=0.25A
- 3. Mounted on P.C. Board with 14mm<sup>2</sup> (0.013mm thick) copper pad areas.





### **RATING AND CHARACTERISTIC CURVES**

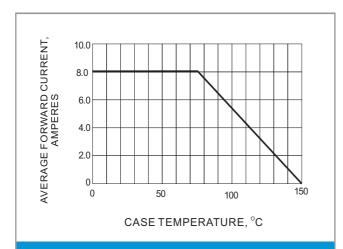


Fig.1-FORWARD CURRENT DERATING CURVE

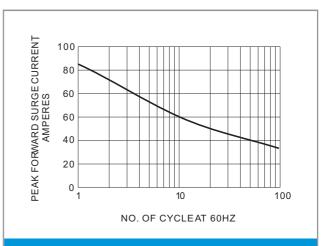


Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

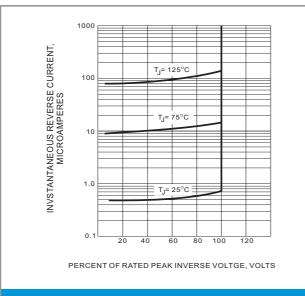


Fig.3-TYPICAL REVERSE CHARACTERISTICS

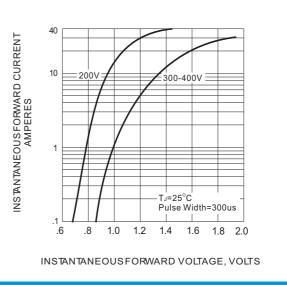


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

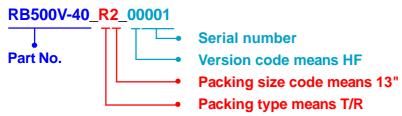




## Part No\_packing code\_Version

ER800F\_T0\_00001 ER800F\_T0\_10001

### For example:



Packing Code XX				Version Code XXXXX				
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code		
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number		
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number		
Bulk Packing (B/P)	В	13"	2					
Tube Packing (T/P)	Т	26mm	X					
Tape and Reel (Right Oriented) (TRR)	s	52mm	Y					
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U					
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D					





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