



# ER800F~ER804F

## SUPERFAST RECOVERY RECTIFIERS

**VOLTAGE** 50 to 400 Volt **CURRENT** 8 Ampere

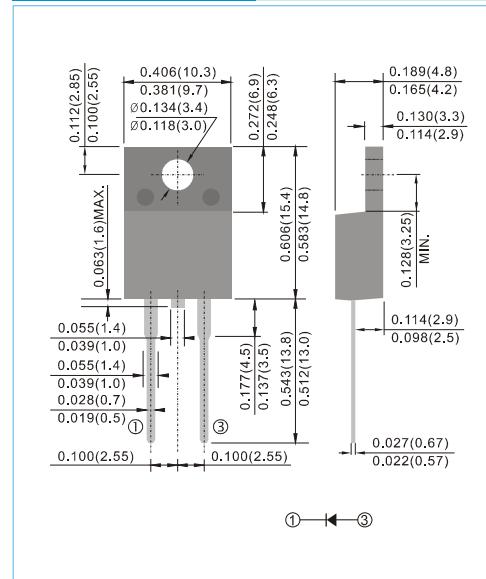
### FEATURES

- 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 RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: Molded plastic, ITO-220AC
- Terminals: Axial leads, solderable to MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.055 ounces, 1.56 grams.

**ITO-220AC** Unit : inch(mm)



### 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 at $T_c=75^\circ C$	$I_{F(AV)}$	8						A			
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	125						A			
Maximum Forward Voltage at 8A (Note 1)	$V_F$	0.95			1.3			V			
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_j=25^\circ C$ $T_j=100^\circ C$	$I_R$	1 300			$\mu A$						
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	35						ns			
Typical Junction Capacitance (Note 2)	$C_J$	65						pF			
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	3						$^\circ C / W$			
Operating Junction and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150						$^\circ C$			

#### NOTES :

1. Pulse Test with PW=300 $\mu$ sec, 2% Duty Cycle.
2. Reverse Recovery Tset Conditions :  $I_F=0.5A, I_R=-1A, I_{rr}=-0.25A$
3. Mounted on P.C. Board with 14mm<sup>2</sup> (0.013mm thick) copper pad areas.



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### RATING AND CHARACTERISTIC CURVES

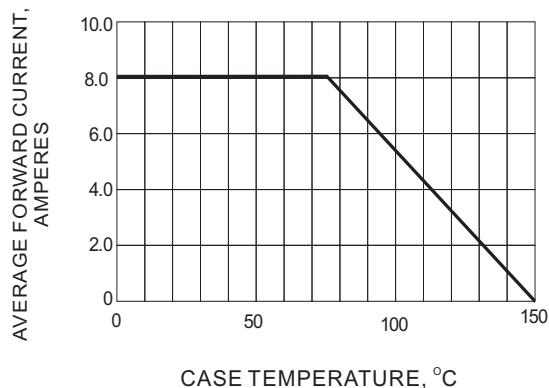


Fig.1-FORWARD CURRENT DERATING CURVE

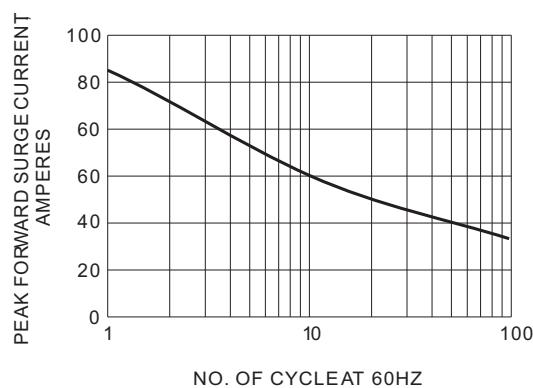


Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

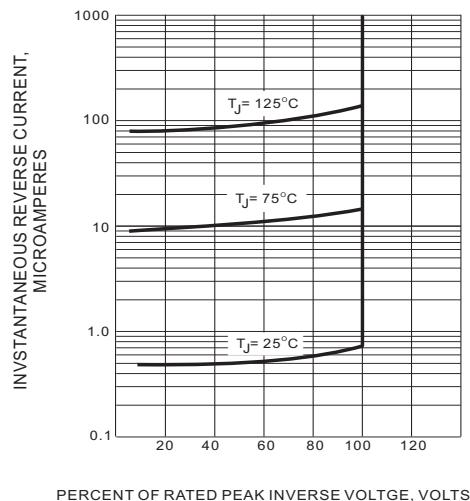


Fig.3-TYPICAL REVERSE CHARACTERISTICS

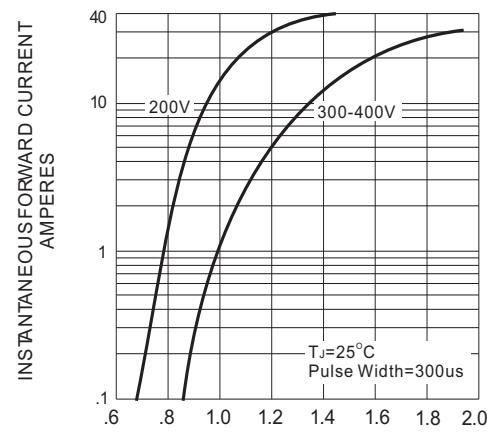


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



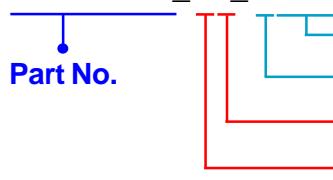
## ER800F~ER804F

### Part No\_packing code\_Version

ER800F\_T0\_00001

For example :

RB500V-40\_R2\_00001

Part No. 

- Serial number
- Version code means HF
- Packing size code means 13"
- Packing type means T/R

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)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	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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