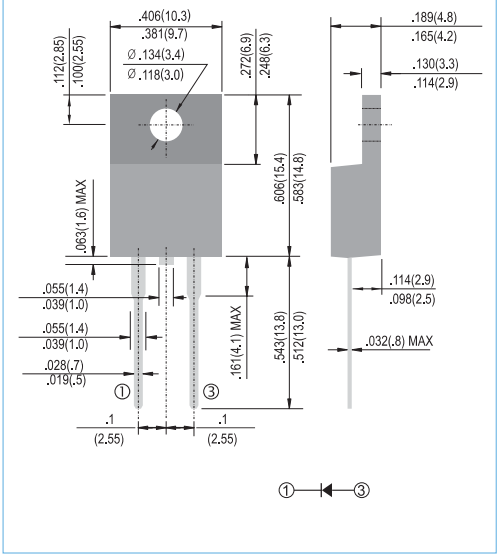
PANJIT SEMI CONDUCTOR

ER800F~ER804F

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.
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANICALDATA

- 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	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°C	$I_{F(AV)}$	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 (Note 1)	V_F	0.95				1.3		V
Maximum DC Reverse Current T_J=25 °C at Rated DC Blocking Voltage T_J=100 °C	I_R	1.0 300						μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	35				50		ns
Typical Junction capacitance(Note 2)	C_J	65						pF
Typical thermal Resistance (Note 3)	$R_{\theta JC}$	3.0						°C / W
Operating Junction 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,Irr=0.25A
3. Mounted on P.C. Board with 14mm2 (.013mm thick) copper pad areas.

ER800F~ER804F

RATING AND CHARACTERISTIC CURVES

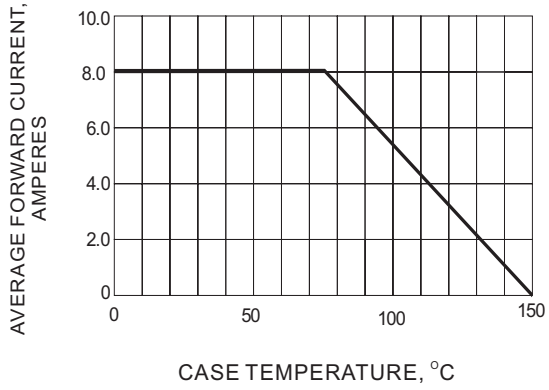


Fig.1-FORWARD CURRENT DERATING CURVE

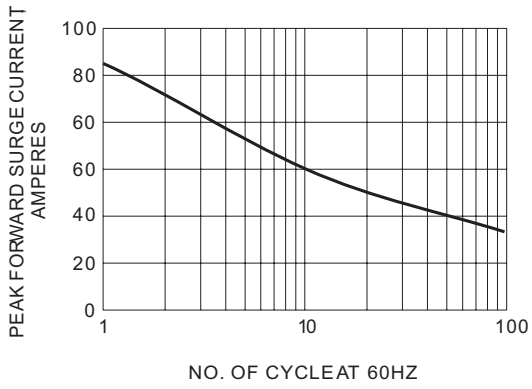


Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

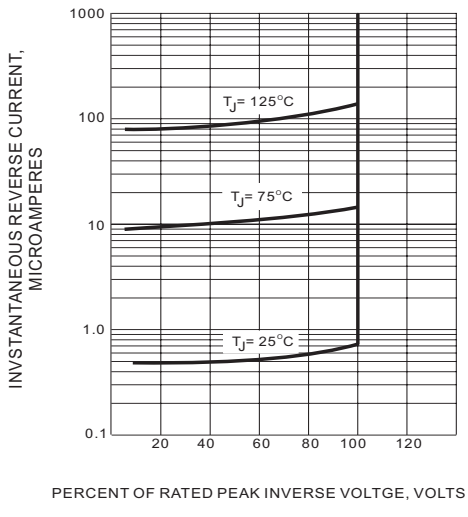


Fig.3-TYPICAL REVERSE CHARACTERISTICS

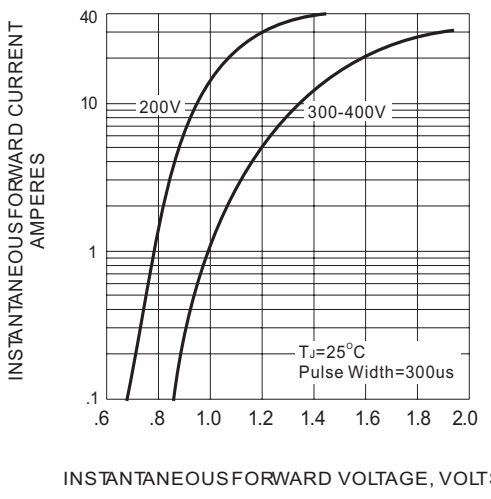


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

ER800F~ER804F

Part No_packing code_Version

ER800F_T0_00001
ER800F_T0_10001

For example :

RB500V-40_R2_00001

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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			

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.