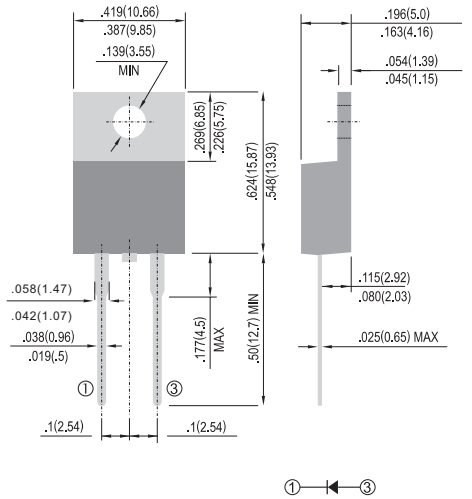
PANJIT SEMI CONDUCTOR

ER800~ER806

SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 50 to 600 Volts **CURRENT** 8.0 Amperes

TO-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, TO-220AC
- Terminals: Axial leads, solderable to MIL-STD-750,Method 2026
- Polarity: As marking
- Weight: 0.0655 ounces, 1.859 grams.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	ER800	ER801	ER801A	ER802	ER803	ER804	ER806	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	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		1.7	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.

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RATING AND CHARACTERISTIC CURVES

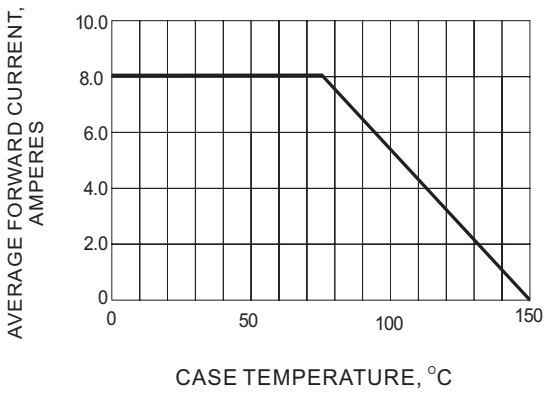

Fig.1-FORWARD CURRENT DERATING CURVE

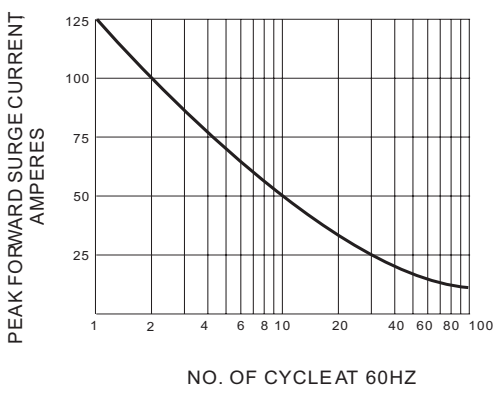

Fig.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

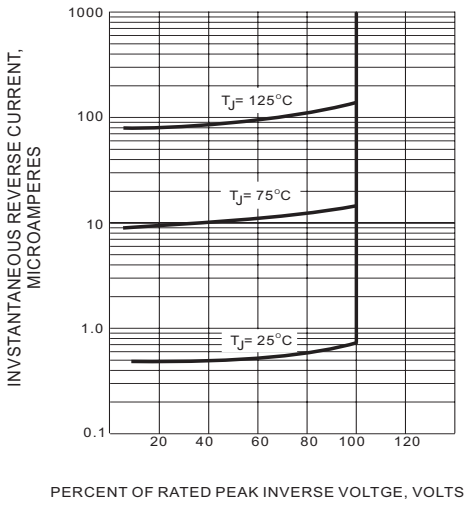

Fig.3-TYPICAL REVERSE CHARACTERISTICS

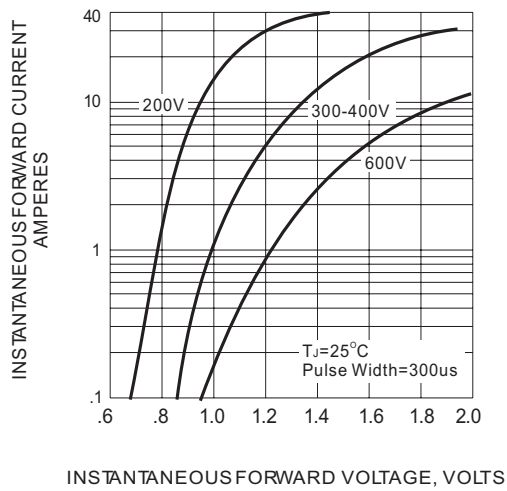

Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

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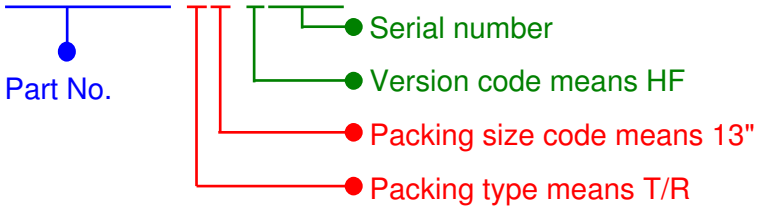
For example :

RB500V-40_R2_00001



Part No_packing code_Version

ER800_T0_00001

ER800_T0_100A1

ER800_T0_10001

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

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