



# ERT802

## SUPERFAST RECOVERY RECTIFIERS

**VOLTAGE** 200 Volt **CURRENT** 8 Ampere

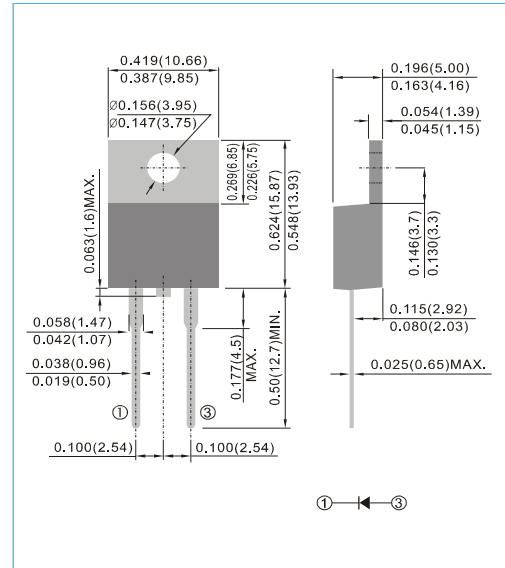
**TO-220AC** Unit : inch(mm)

### FEATURES

- Hyperfast recovery time.
- 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 compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Molded plastic, TO-220AC
- Terminals: 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.

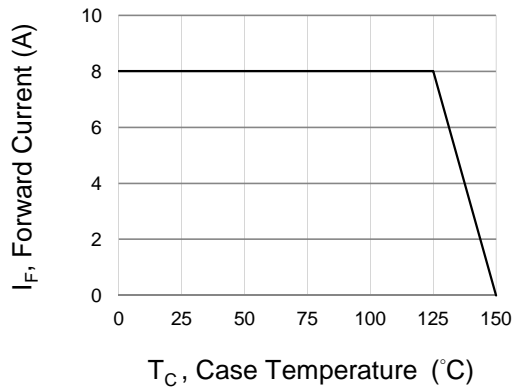
PARAMETER	SYMBOL	VALUE	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	V
Maximum RMS Voltage	$V_{RMS}$	140	V
Maximum DC Blocking Voltage	$V_{DC}$	200	V
Maximum Average Forward Current	$I_{F(AV)}$	8	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	125	A
Maximum Forward Voltage at 8A	$V_F$	0.95	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	1	$\mu A$
Maximum Reverse Recovery Time (Note 2)	$t_{rr}$	25	ns
Typical Junction Capacitance (Note 1)	$C_J$	75	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	1.5	$^{\circ}C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	$^{\circ}C$

### NOTES :

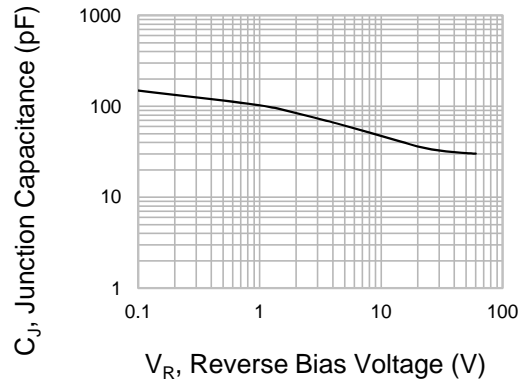
1. Measured at 1 MHz and Applied Reverse Voltage of 4 Volts.
2. Reverse Recovery Tset Conditions:  $I_F=0.5A, I_R=1A, I_{rr}=0.25A$
3. Mounted on infinite heatsink



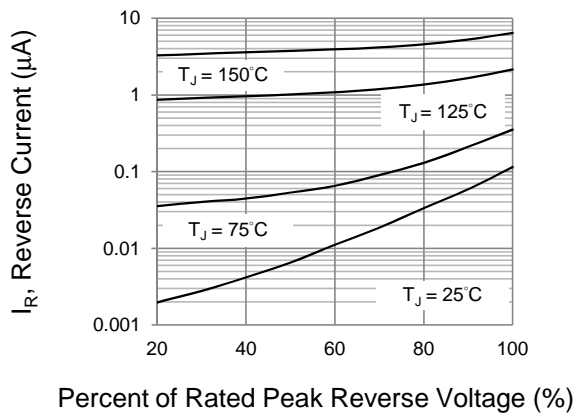
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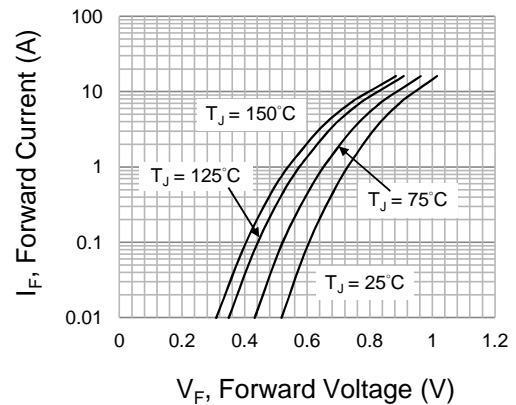
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**



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## Part No\_packing code\_Version

ERT802\_T0\_00001

ERT802\_T0\_10001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
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)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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