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SUPERFAST RECOVERY RECTIFIERS

VOLTAGE 200 Volt **CURRENT** 8 Ampere

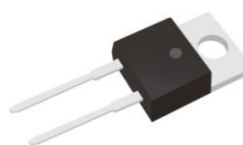
FEATURES

- Hyperfast recovery time.
- 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
- Green molding compound as per IEC61249 Std. . (Halogen Free)

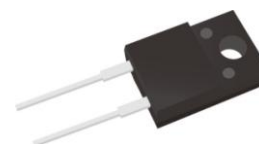
MECHANICAL DATA

- Case: Molded plastic, TO-220AC, ITO-220AC
- Terminals: Solderable to MIL-STD-750, Method 2026
- Polarity: As marking
- Marking: Part number
- TO-220AC Weight: 0.067 ounces, 1.89 grams.
- ITO-220AC Weight: 0.055 ounces, 1.56 grams.

ERT802 TO-220AC



ERT802F ITO-220AC



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	μA
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 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. Device mounted on a infinite heatsink , then measured the center of the marking side.

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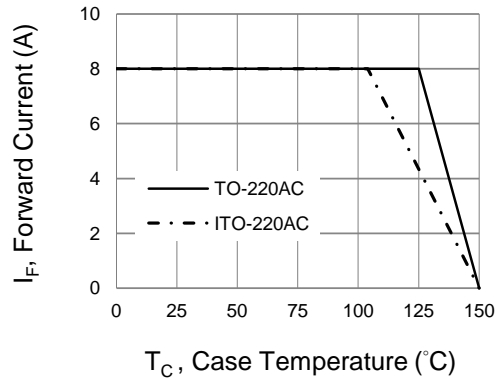


Fig.1 Forward Current Derating Curve

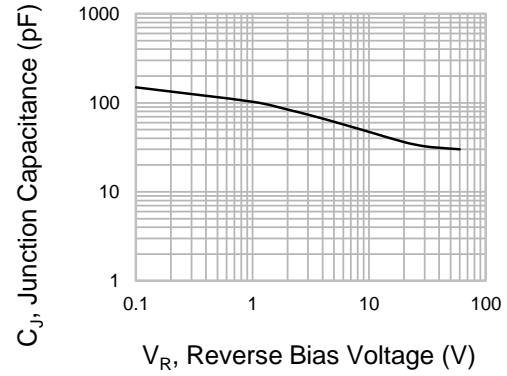


Fig.2 Typical Junction Capacitance

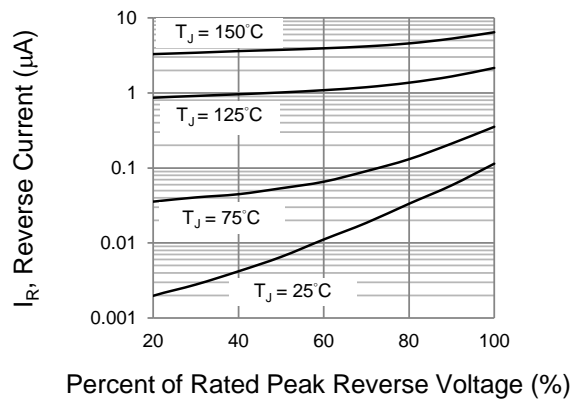


Fig.3 Typical Reverse Characteristics

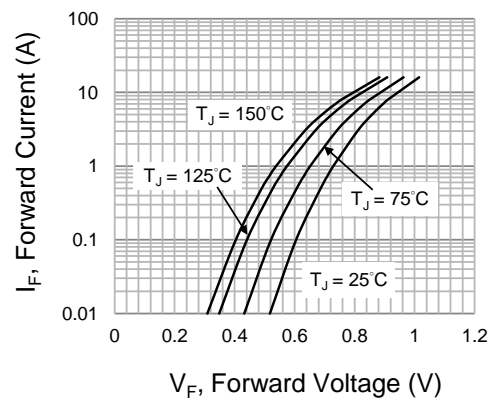


Fig.4 Typical Forward Characteristics

TO-220AC

ITO-220AC

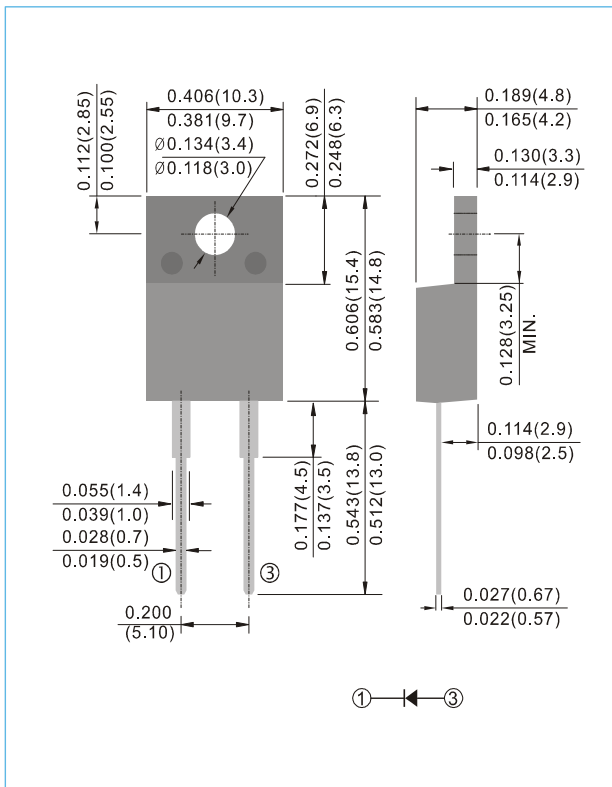
Technical drawing of a mechanical assembly showing a cross-section of a housing and a shaft with a pin. The drawing includes dimensions in millimeters (mm) and inches (in).

Dimensions (mm / in):

- Top horizontal dimensions: 0.419 (10.66), 0.387 (9.85)
- Top circular features: $\varnothing 0.156$ (3.95), $\varnothing 0.147$ (3.75)
- Vertical dimensions on the right: 0.269 (6.85), 0.226 (5.75), 0.624 (15.87), 0.548 (13.93)
- Left vertical dimension: 0.063 (1.6) MAX.
- Bottom horizontal dimensions: 0.058 (1.47), 0.042 (1.07), 0.038 (0.96), 0.019 (0.50)
- Bottom vertical dimension: 0.177 (4.5) MAX.
- Bottom horizontal dimension: 0.50 (12.7) MIN.
- Bottom left dimension: 0.200 (5.08)
- Right side dimensions: 0.196 (5.00), 0.163 (4.16), 0.054 (1.39), 0.045 (1.15), 0.146 (3.7), 0.130 (3.3), 0.115 (2.92), 0.080 (2.03), 0.025 (0.65) MAX.

Detail View:

The detail view shows a cross-section of a pin with a diameter of 0.025 (0.65) MAX. The pin is shown in two positions, labeled ① and ③, with a double-headed arrow indicating the range of motion.



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Part No_packing code_Version

ERT802_T0_00001

ERT802F_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 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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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