

ERT3AAF SERIES

SURFACE MOUNT SUPERFAST RECTIFIER

VOLTAGE 50~400 Volt **CURRENT** 3 Ampere

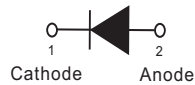
SMBF Unit : inch(mm)

FEATURES

- For surface mounted applications in order to optimize board space
- High temperature metallurgically bonded-no compression
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass passivated junction
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Hyperfast recovery time
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SMBF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity: Color band denotes cathode end



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	ERT3AAF	ERT3BAF	ERT3CAF	ERT3DAF	ERT3EAF	ERT3GAF	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	V
RMS Voltage	V _{RMS}	35	70	105	140	210	280	V
DC Blocking Voltage	V _R	50	100	150	200	300	400	V
Average Forward Current	I _{F(AV)}	3						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	75						A
Forward Voltage at 3A	V _F	0.95				1.25		V
DC Reverse Current at Rated DC Blocking Voltage T _J =25°C	I _R	1						μA
Typical Junction Capacitance (Note 1)	C _J	50				40		pF
Typical Thermal Resistance ,Junction to Lead (Note 3) Junction to Ambient (Note 4)	R _{θJL} R _{θJA}	20 135						°C / W
Reverse Recovery Time (Note 2)	T _{rr}	25						ns
Operating Junction Temperature and Storage Temperature Range	T _J ,T _{STG}	-55 to +150						°C

NOTES:1.Measured at 1 MHz and Applied Reverse Voltage of 4 Volt.
2.Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Recover to 0.25A.
3.Mounted on a FR4 PCB, single-sided copper, with 10cm*10cm copper pad area
4.Mounted on a FR4 PCB, single-sided copper, mini pad.

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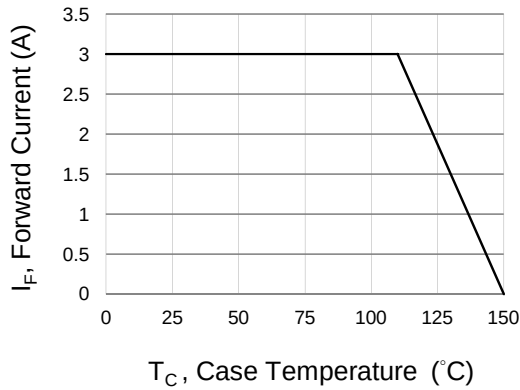


Fig.1 Forward Current Derating Curve

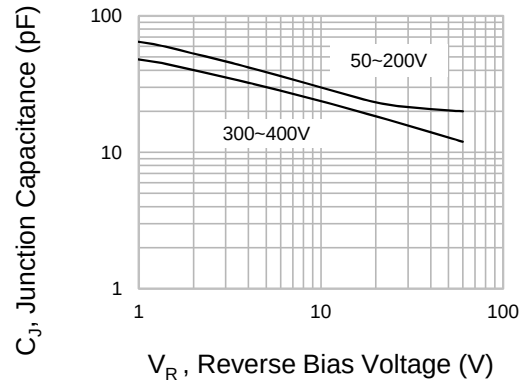


Fig.2 Typical Junction Capacitance

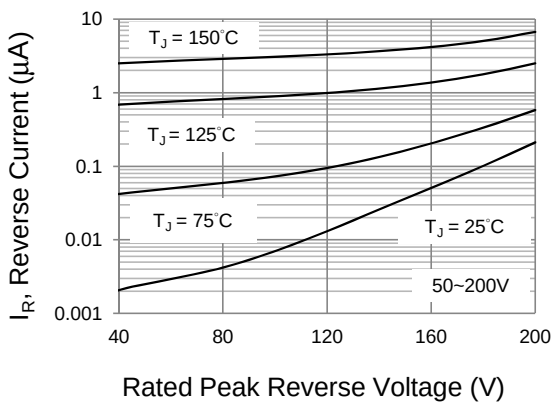


Fig.3 Typical Reverse Characteristics

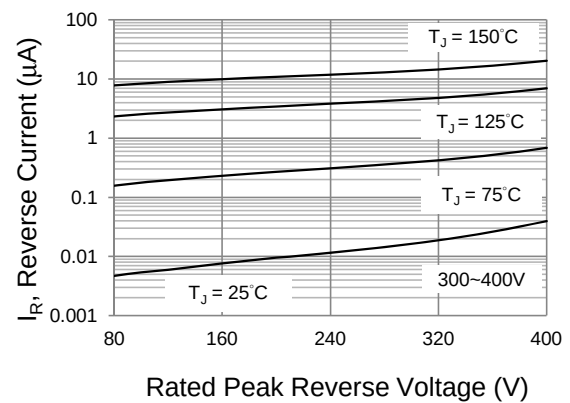


Fig.4 Typical Reverse Characteristics

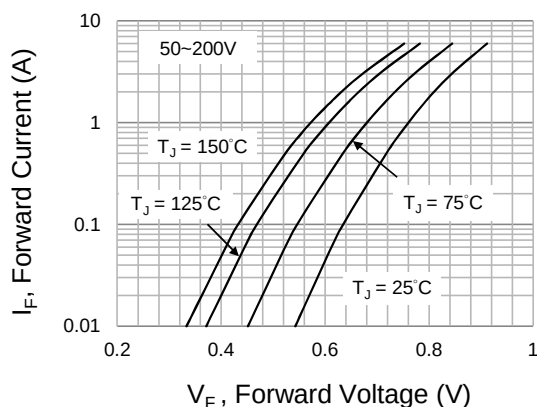


Fig.5 Typical Forward Characteristics

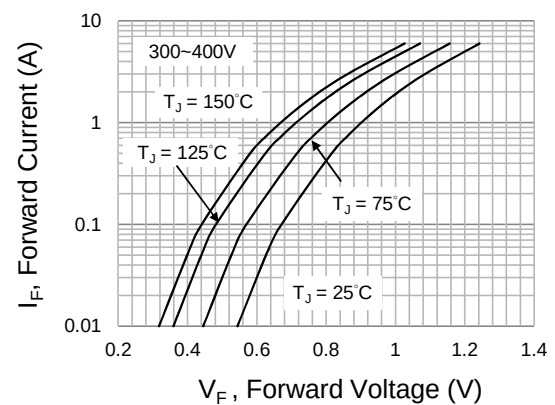


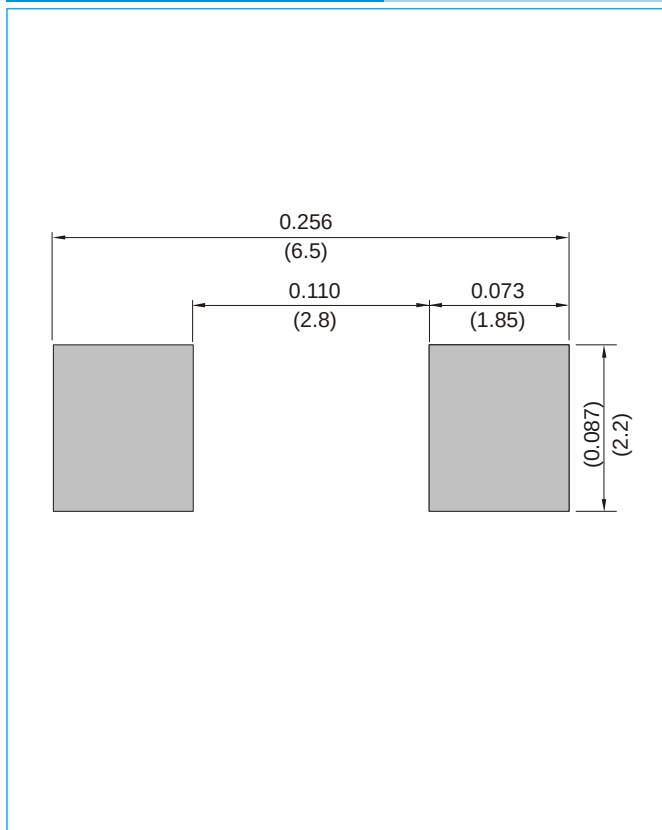
Fig.6 Typical Forward Characteristics

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MOUNTING PAD LAYOUT

SMBF

Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R - 5K per 13" plastic Reel

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Part No_packing code_Version

ERT3AAF_R2_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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