



ER3EAF / ER3GAF

SURFACE MOUNT SUPERFAST RECTIFIER

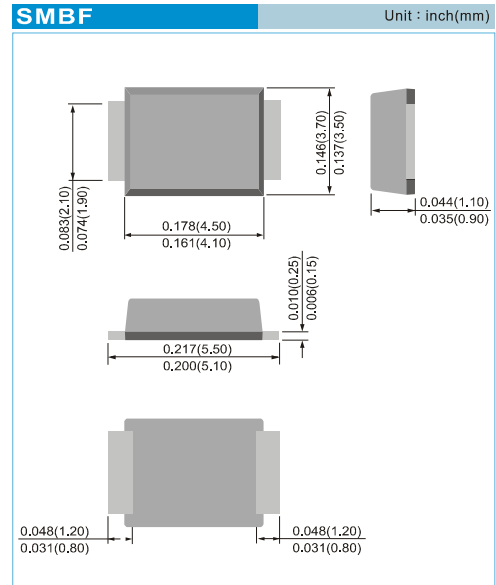
VOLTAGE 300~400 Volt **CURRENT** 3 Ampere

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
- 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	ER3EAF	ER3GAF	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	300	400	V
RMS Voltage	V _{RMS}	210	280	V
DC Blocking Voltage	V _R	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}	80		A
Forward Voltage at 3A	V _F	1.25		V
DC Reverse Current at Rated DC Blocking Voltage	I _R	1		μA
Reverse Recovery Time (Notes 2)	t _{rr}	35		ns
Typical Junction Capacitance (Notes 1)	C _J	40		pF
Typical Thermal Resistance (Notes 3) (Notes 4)	R _{θJL} R _{θJA}	20 135		°C / W
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: I_F=0.5A, I_R=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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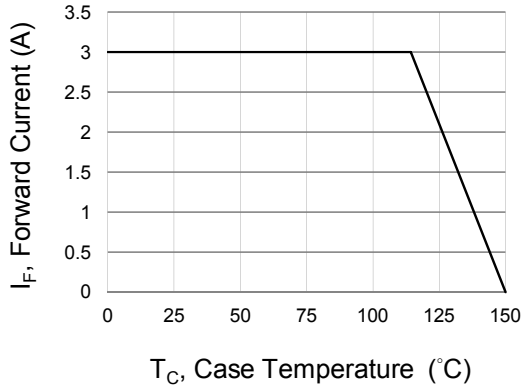


Fig.1 Forward Current Derating Curve

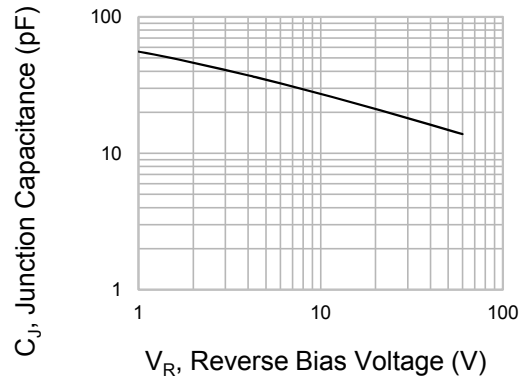


Fig.2 Typical Junction Capacitance

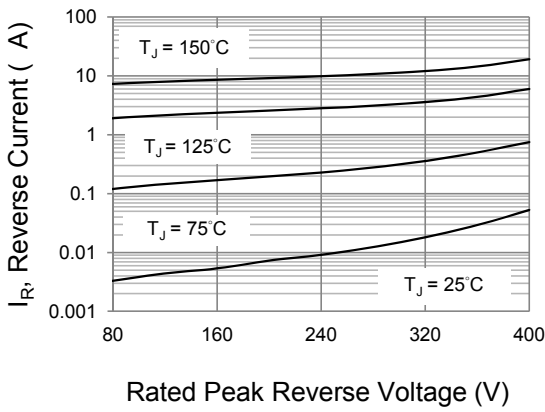


Fig.3 Typical Reverse Characteristics

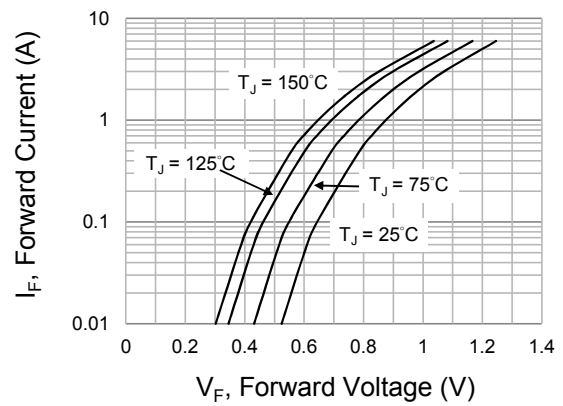


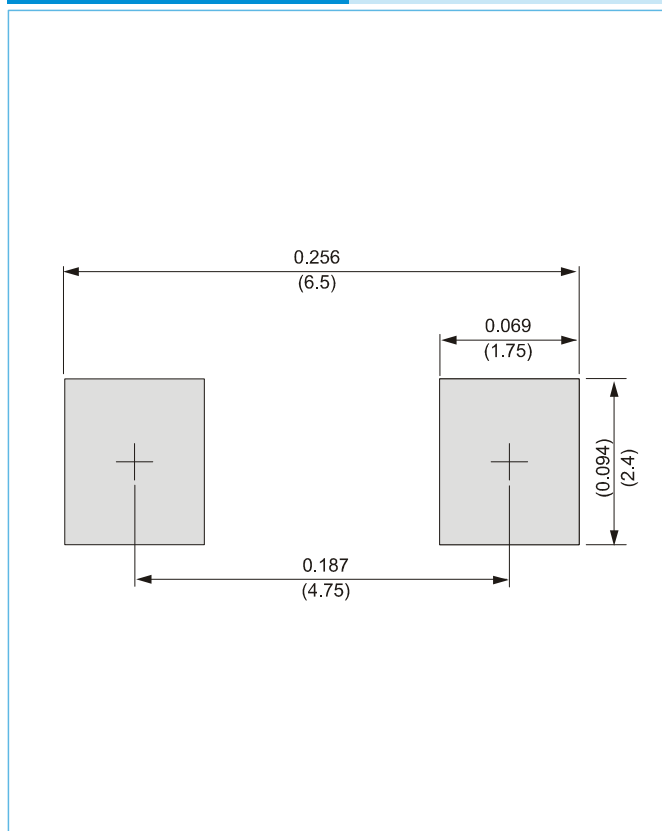
Fig.4 Typical Forward Characteristics



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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

ER3EAF_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXXX		
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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