

ER2AF SERIES



SURFACE MOUNT SUPERFAST RECTIFIER

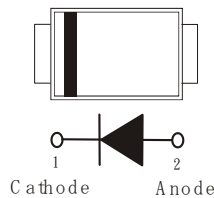
VOLTAGE 50-600 Volts **CURRENT** 2 Amperes

FEATURES

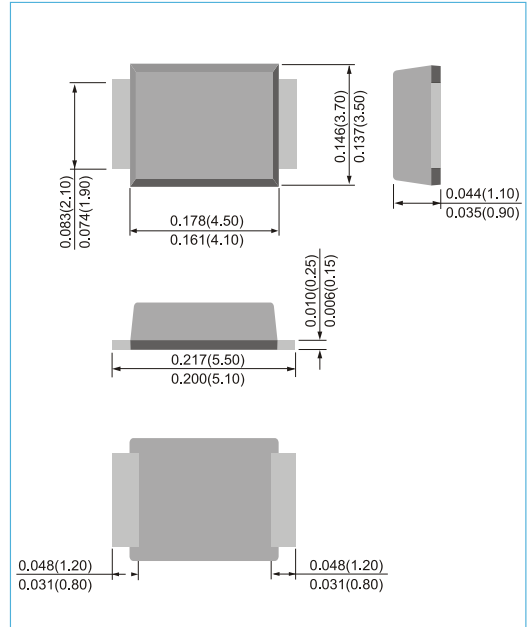
- For surface mounted applications
- High temperature metallurgically bonded-no compression
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass passivated junction
- Lead free in comply with EU RoHS 2002/95/EC directives.
- 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



SMBF Unit : inch(mm)



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

PARAMETER	SYMBOL	ER2AF	ER2BF	ER2CF	ER2DF	ER2EF	ER2GF	ER2JF	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	V
RMS Voltage	V _{RMS}	35	70	105	140	210	280	420	V
DC Blocking Voltage	V _R	50	100	150	200	300	400	600	V
Average Forward Current	I _{F(AV)}	2.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	50							A
Forward Voltage at 2.0A	V _F	0.95			1.25		1.7		V
DC Reverse Current at Rated DC Blocking Voltage T _J =25°C	I _R	1							μA
Typical Junction capacitance V _R =4V,f=1MHz	C _J	30			20			pF	
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R _{θJL} R _{θJA}	18 135				°C / W			
Reverse Recovery Time (I _F =0.5A, I _R =1.0A,I _{rr} =0.25A)	T _{rr}	35				ns			
Operating Junction Temperature and Storage Temperature Range	T _J ,T _{STG}	-55 to +150							°C

NOTES : 1. Mounted on an FR4 PCB, single-sided copper, with 48cm² copper pad area
2. Mounted on an FR4 PCB, single-sided copper, mini pad.

[Http://www.gmsemi.com](http://www.gmsemi.com)

RATING AND CHARACTERISTIC CURVES

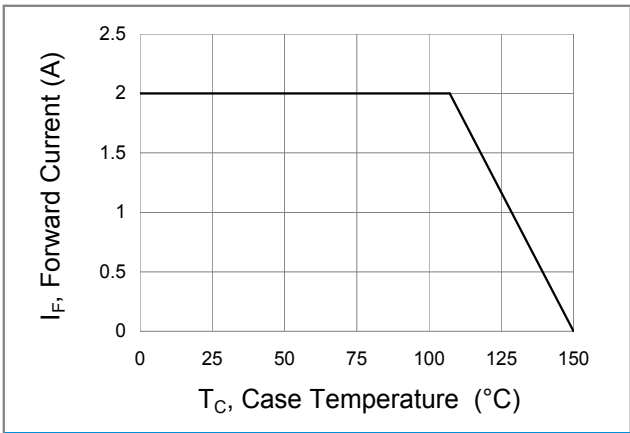


Fig.1 Forward Current Derating Curve

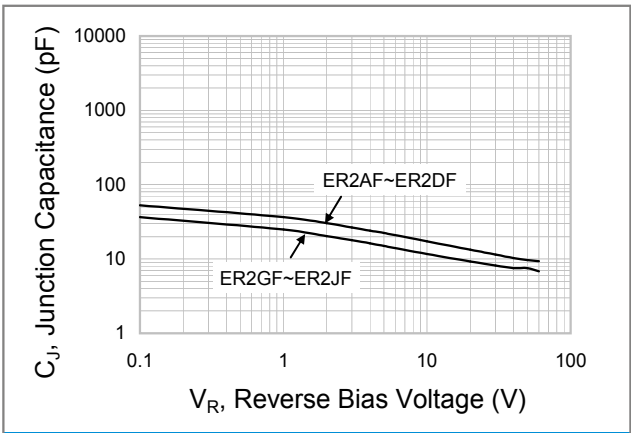


Fig.2 Typical Junction Capacitance

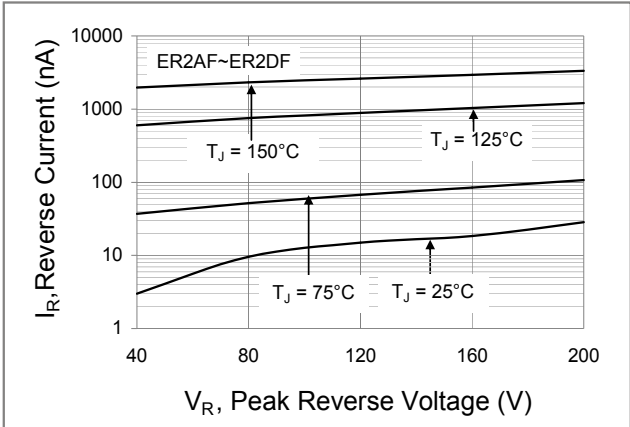


Fig.3 Typical Reverse Characteristics

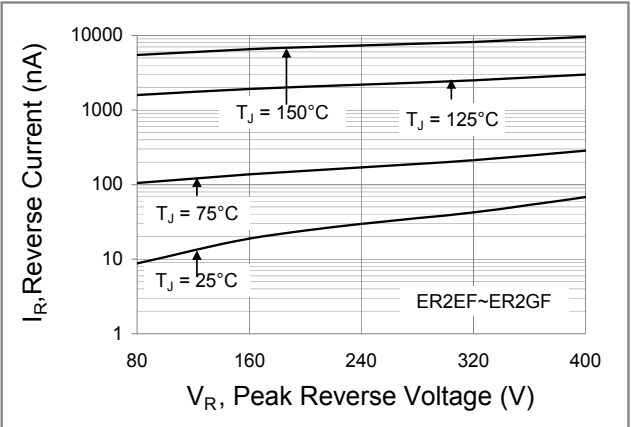


Fig.4 Typical Reverse Characteristics

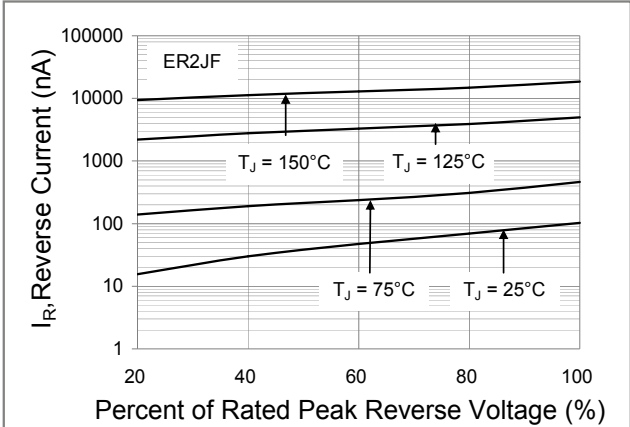


Fig.5 Typical Reverse Characteristics

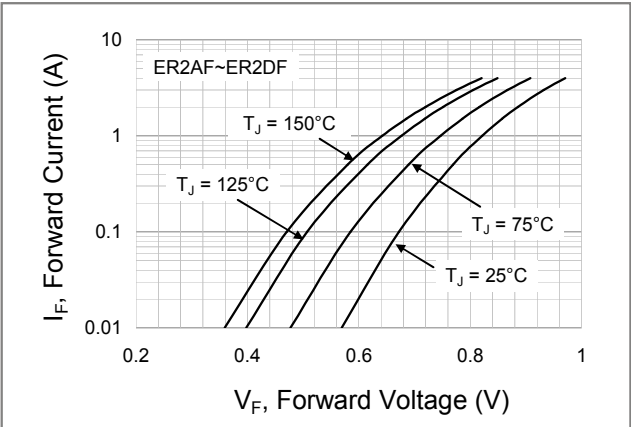


Fig.6 Typical Forward Characteristics

RATING AND CHARACTERISTIC CURVES

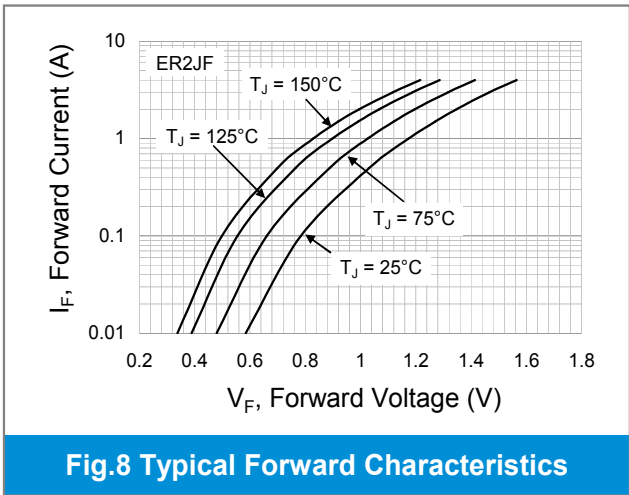
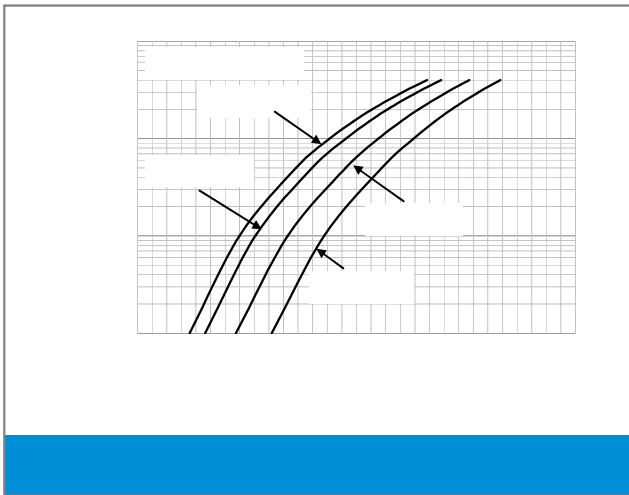


Fig.8 Typical Forward Characteristics