FR2DF ~ FR2MF

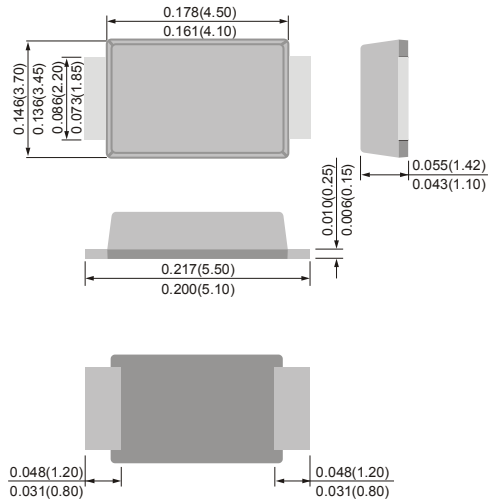
FAST RECOVERY RECTIFIER

VOLTAGE 200 to 1000 Volts **CURRENT** 2.0 Ampere

Green

SMBF

Unit : inch(mm)



FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Fast Recovery times for high efficiency
- 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

MECHANICAL DATA

- Case: SMBF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	FR2DF	FR2GF	FR2JF	FR2KF	FR2MF	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0					A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)per diode	I_{FSM}	50					A
Maximum Forward Voltage at 2A	V_F	1.3					V
Maximum DC Reverse Current T_J=25°C	I_R	5					μA
Typical Junction Capacitance (VR=4V f=1MHZ)	C_J	24				14	pF
Typical Thermal Resistance (Note 1) (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	20 135					°C / W
Maximum Reverse Recovery Time	T_{rr}	150		250	500		nS
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150					°C

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

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RATING AND CHARACTERISTIC CURVES

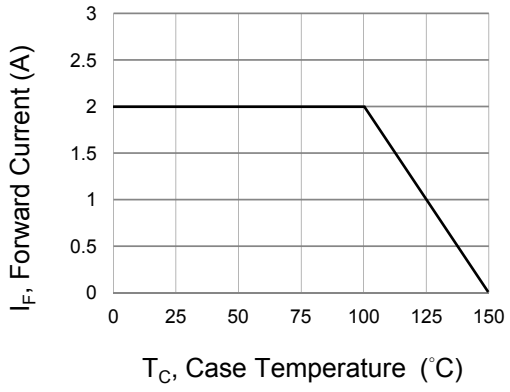

Fig.1 Forward Current Derating Curve

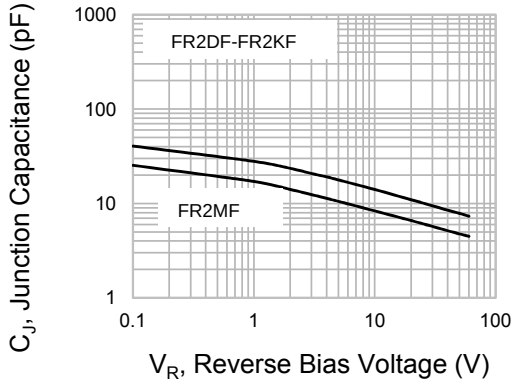

Fig.2 Typical Junction Capacitance

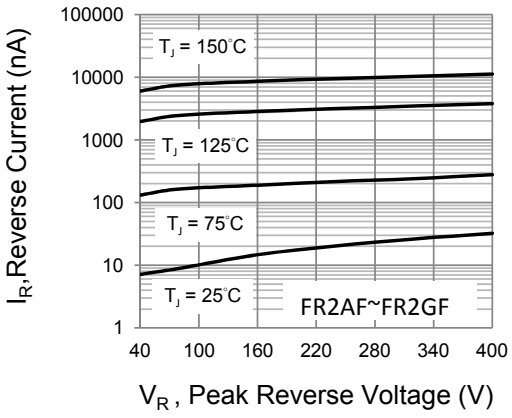

Fig.3 Typical Reverse Characteristics

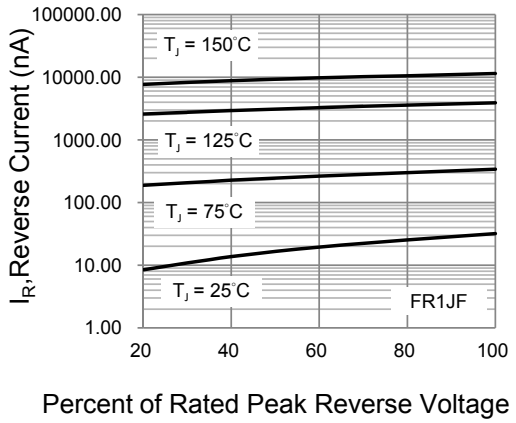

Fig.4 Typical Reverse Characteristics

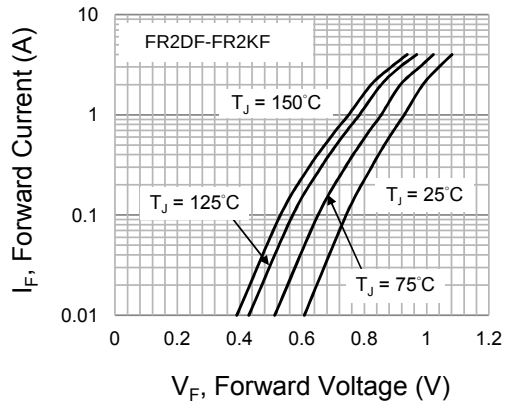

Fig.5 Typical Forward Characteristics

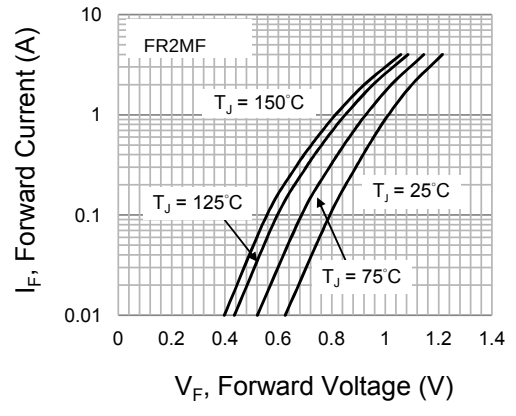

Fig.6 Typical Forward Characteristics