

SMBF Plastic-Encapsulate Diodes

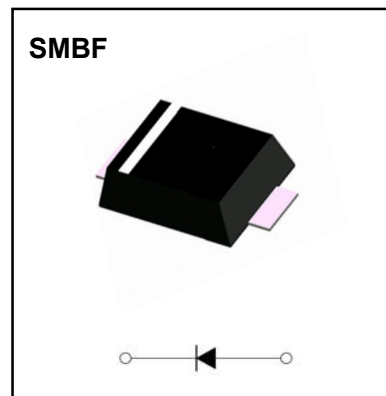
Fast Recovery Rectifier Diode

Features

- I_O 5A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip
- Polarity: Color band denotes cathode

Applications

- Rectifier



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	RS5						
				ABF	BBF	DBF	GBF	JBF	KBF	MBF
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load,	5						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave ,1 cycle , $T_a = 25^\circ\text{C}$	150						
Junction Temperature	T_J	$^\circ\text{C}$		-55~+150						
Storage Temperature	T_{STG}	$^\circ\text{C}$		-55 ~ +150						

Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		RS5						
					ABF	BBF	DBF	GBF	JBF	KBF	MBF
Peak Forward Voltage	V _F	V	I _F =5.0A		1.3						
Maximum reverse recovery time	t _{rr}	ns	I _F =0.5A,I _R =1.0A,I _{rr} =0.25A		150				250	500	
Peak Reverse Current	I _{RRM1}	μA	V _{RM} =V _{RRM}	T _a =25℃	5						
	T _a =125℃			150							
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		78						

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

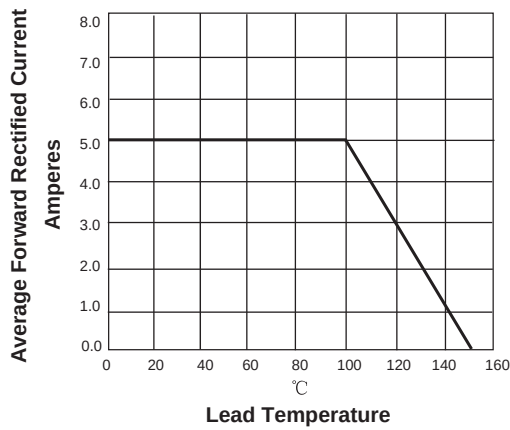


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

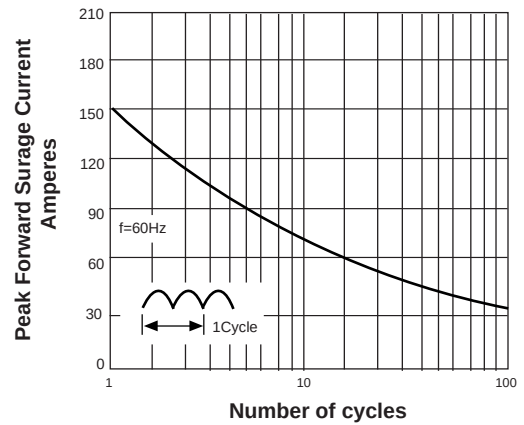


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

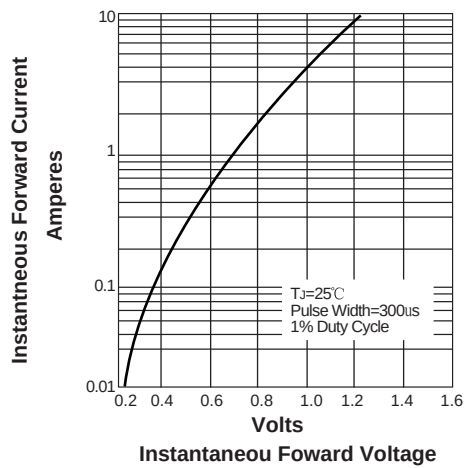
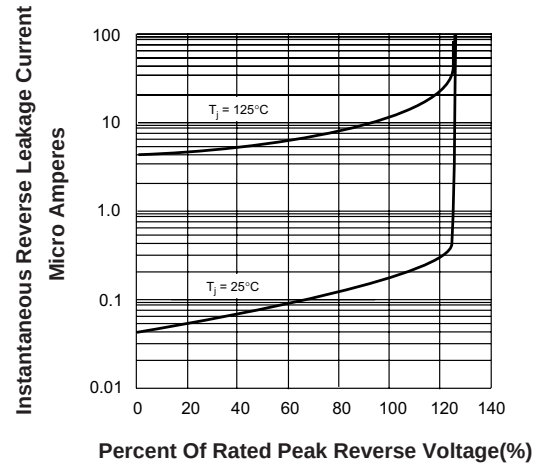


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



SMBF Package Outline Dimensions

