

Schottky Barrier Rectifier 100V Current 10A

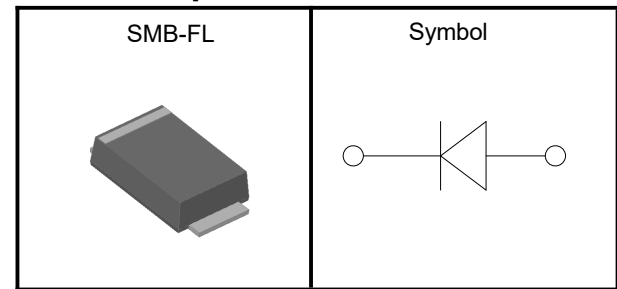
Feature

- Low VF
- High forward surge capability
- RoHS Compliant & Halogen-Free
- Polarity: Cathode line denotes the cathode end

Applications

- High frequency switch power supply
- Free wheeling diodes,polarity protection applications

Pin Description



IF(AV)	10	A
VRRM	110	V
VF(Typ)@125℃	0.65	V

Absolute Maximum Ratings (T_c=25℃ unless otherwise noted)

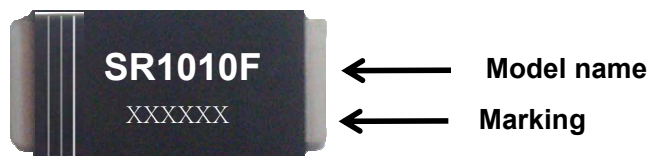
Parameter		Symbol	Limit	Unit
Peak Repetitive Reverse Voltage		VRRM	100	V
Working Peak Reverse Voltage		VRWM	100	V
DC Blocking Voltage		VDC	100	V
RMS Reverse Voltage		VRMS	70	v
Average Forward Rectified Current @Tc=125℃	per diode	IF(AV)	10	A
	Per device	IF(AV)	10	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		IFSM	150	A
Operating Junction and Storage Temperature Range		TJ, TSTG	-55 To 150	℃

Thermal Characteristic

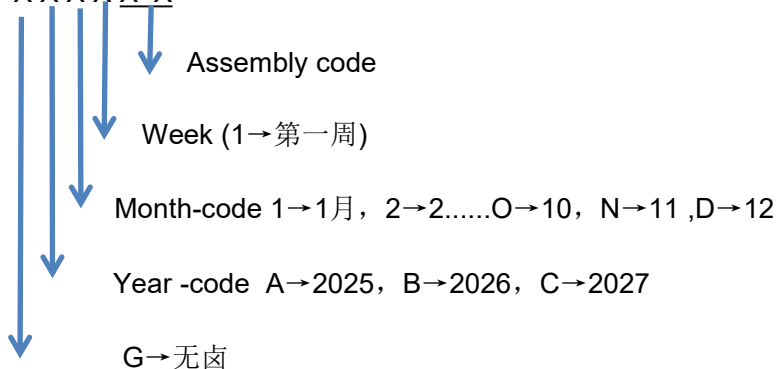
Thermal Resistance,Junction-to-Lead	RθJL	17	℃/W
Thermal Resistance,Junction-to-Ambient	RθJA	75	℃/W

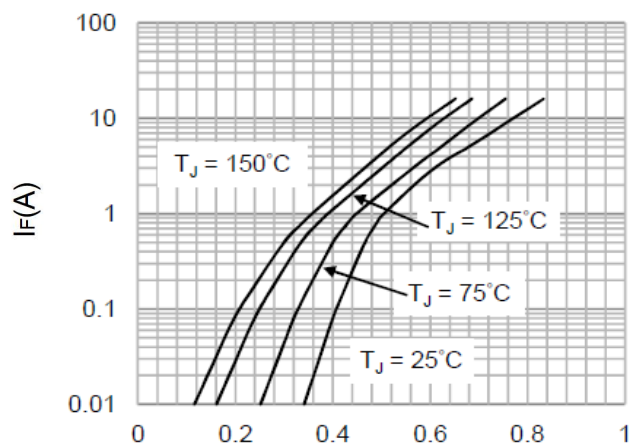
**Schottky Barrier Rectifier 100V Current 10A****Electrical Characteristics ($T_c=25^{\circ}\text{C}$ unless otherwise noted)**

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V_{RRM}	$I_R=-100\mu\text{A}$	110	-	-	V
Forward Voltage Drop	V_F	$I_F=2\text{A}, T_J=25^{\circ}\text{C}$	-	0.60	-	V
		$I_F=2\text{A}, T_J=125^{\circ}\text{C}$	-	0.45	-	V
Forward Voltage Drop	V_F	$I_F=5\text{A}, T_J=25^{\circ}\text{C}$	-	0.70	-	V
		$I_F=5\text{A}, T_J=125^{\circ}\text{C}$	-	0.55	-	V
Forward Voltage Drop	V_F	$I_F=10\text{A}, T_J=25^{\circ}\text{C}$	-	0.76	0.85	V
		$I_F=10\text{A}, T_J=125^{\circ}\text{C}$	-	0.65	-	V
Reverse Leakage Current	I_R	$V_R=100\text{V}, T_J=25^{\circ}\text{C}$	-	0.5	10	μA
		$V_R=100\text{V}, T_J=125^{\circ}\text{C}$	-		5	mA

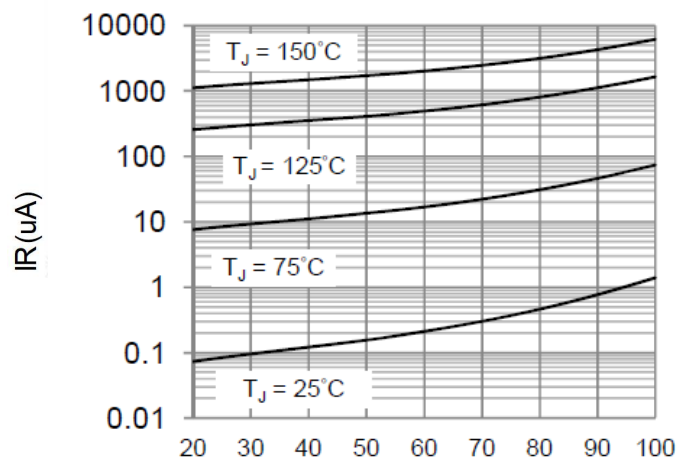
Marking Information**Marking**

X X X X X X

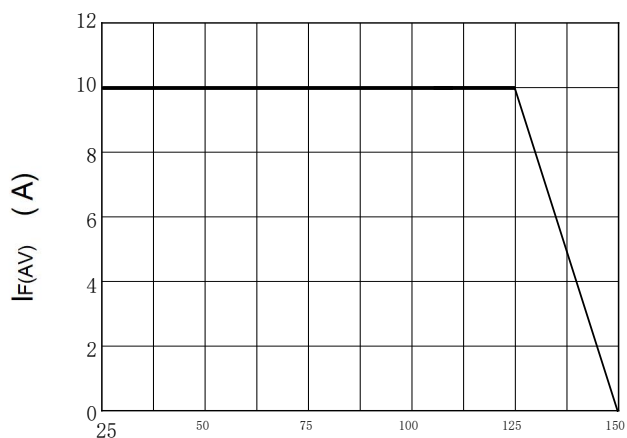


ELECTRICAL CHARACTERISTICS(curves)
Fig 1. Typical Forward Characteristics


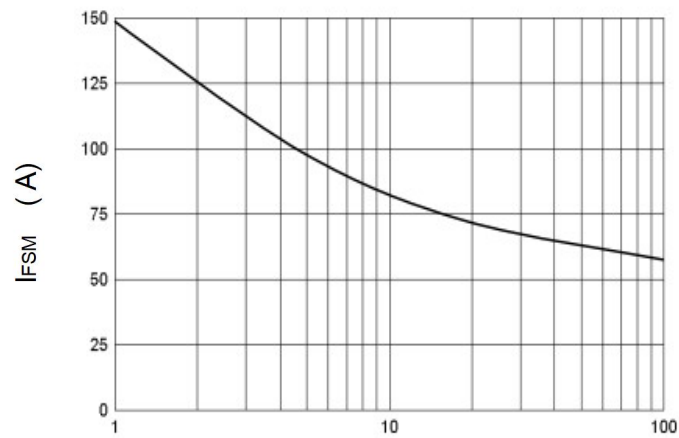
Instantaneous Forward Voltage (V)

Fig 2. Typical Reverse Characteristics


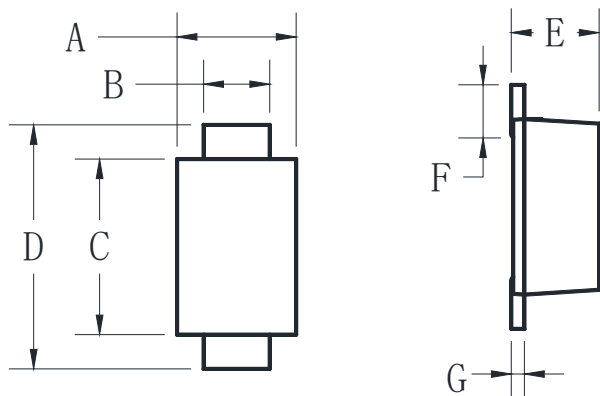
Percent of Rated Peak Reverse Voltage (%)

Fig 3. Forward Current Derating Curve


Case Temperature (°C)

Fig 4. Non-repetitive Forward Surge Current


Number of Cycles at 60Hz

SMBF Package Outline Dimensions


SMB-FL		
Dim	Min	Max
A	3.40	3.80
B	1.90	2.10
C	4.15	4.75
D	5.10	5.70
E	1.05	1.55
F	0.70	1.50
G	0.15	0.35