

Schottky Barrier Rectifiers

Reverse Voltage - 150 V

Forward Current - 5.0 A

FEATURES

- ◆ For surface mounted applications
- ◆ Ideal for automated placement
- ◆ High forward surge current capability
- ◆ The plastic package carries Underwriters
- ◆ Laboratory Flammability Classification 94V-0
- ◆ High temperature soldering guaranteed 260°C/10 seconds at terminals
- ◆ Case :SMBF

Application

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

Absolute Maximum Ratings and Electrical characteristics

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

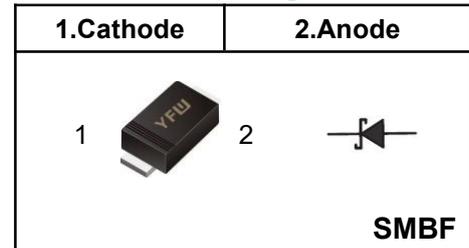
Parameter	Symbols	SSL515BF	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS voltage	V_{RMS}	105	V
Maximum DC Blocking Voltage	V_{DC}	150	V
Maximum Average Forward Rectified Current TC=125°C	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	120	A
Maximum Instantaneous Forward Voltage at 5.0 A	V_F	0.8	V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage	I_R	$T_A = 25^\circ C$ 0.1	uA
		$T_A = 125^\circ C$ 0.1	mA
		$T_A = 150^\circ C$ 0.5	mA
Typical Junction Capacitance	C_j	100	pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$	58	°C/W
		15	
Operating Junction Temperature Range	T_j	-55 ~ +150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

Note:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

Pinning



Marking Code

SSL515BF	YFW SL515B
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Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

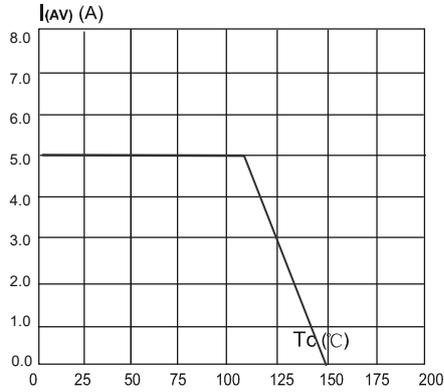


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

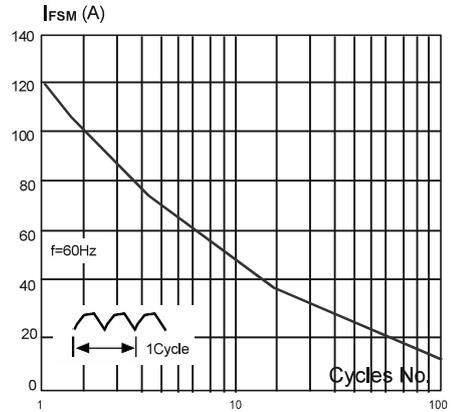


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

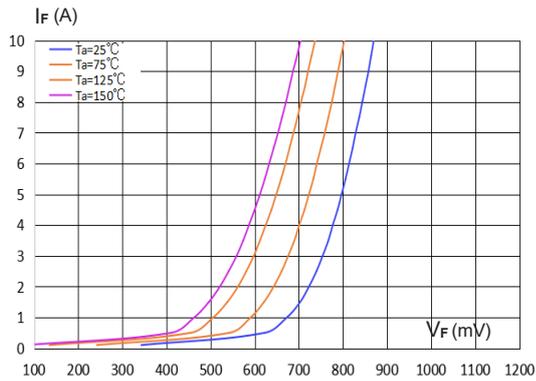
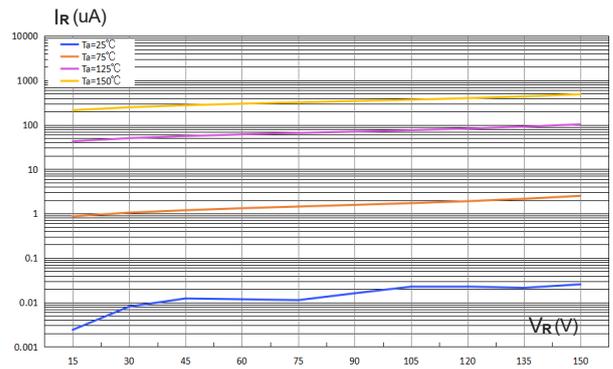
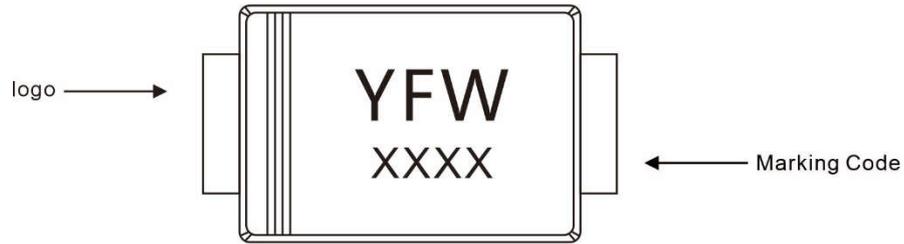


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

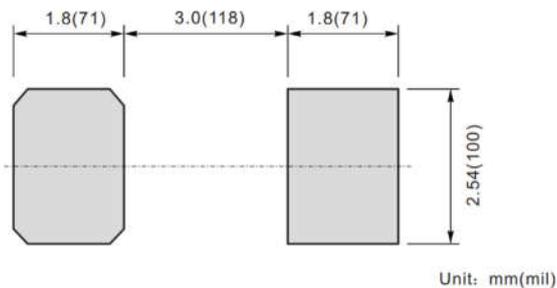
Package	Packing Description	Packing Quantity
SMBF	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

SMBF

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.1	1.3	43	51
C	0.18	0.26	7	10
D	4.2	4.4	165	173
E	3.5	3.7	138	146
H _E	5.1	5.5	200	216
e	2.2	1.9	75	86
g	1.0		40	
∠	9°			

The recommended mounting pad size



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