

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 200 V

Forward Current - 5 A

FEATURES

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆For surface mounted applications
- ◆Built-in strain relief,ideal for automated placement
- ◆Low reverse leakage
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed 260°C /10 seconds at terminals

MECHANICAL DATA

- ◆Case : Molded plastic body
- ◆Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- ◆Polarity : Polarity symbol marking on body
- ◆Mounting Position : Any
- ◆Weight : 0.0020 ounce, 0.057 grams

Pinning

1.Cathode	2.Anode
	
	
SMBF	

Marking Code

SSL520BF	YFW SL520B
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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	SSL520BF	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum average forward rectified current at $T_L=100\text{ }^{\circ}\text{C}$	$I_{(AV)}$	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	0.78	V
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage $T_A = 25^{\circ}\text{C}$ $T_A = 100^{\circ}\text{C}$	I_R	0.05 10	mA
Typical Thermal Resistance	$R_{\theta JA}$	78.0	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	T_j	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 ~ +150	$^{\circ}\text{C}$

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

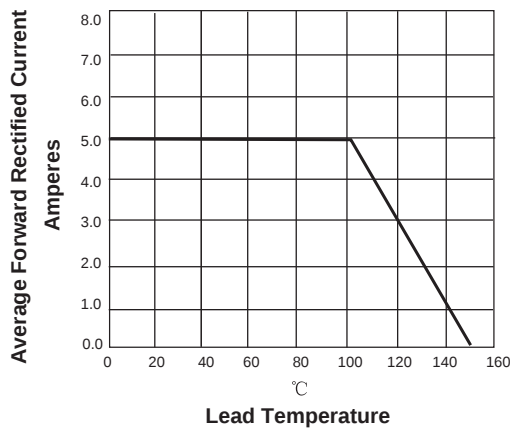


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

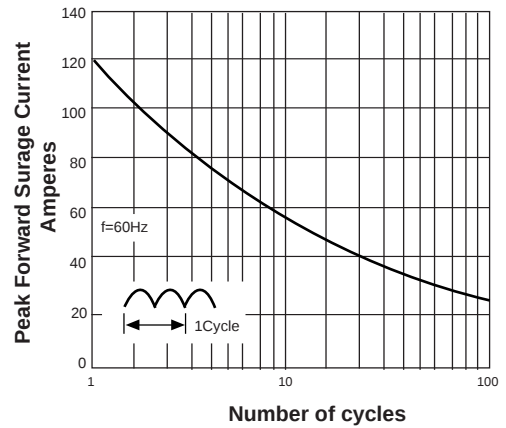


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

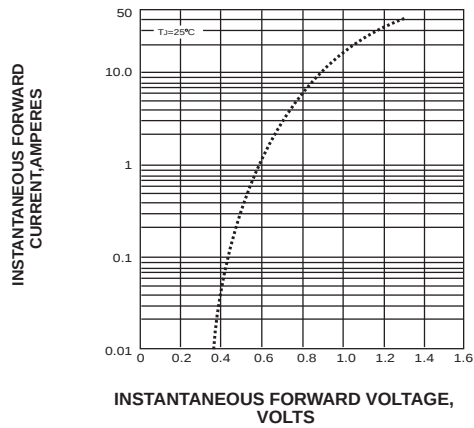
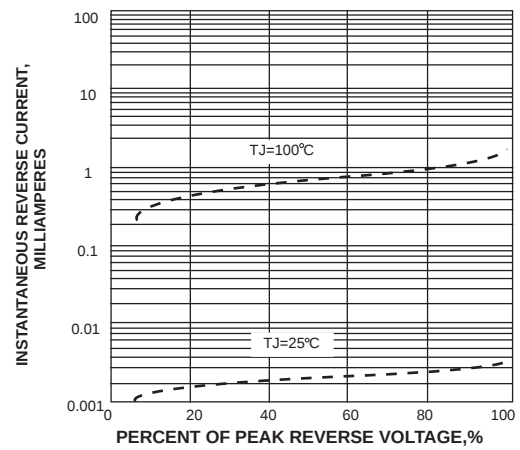
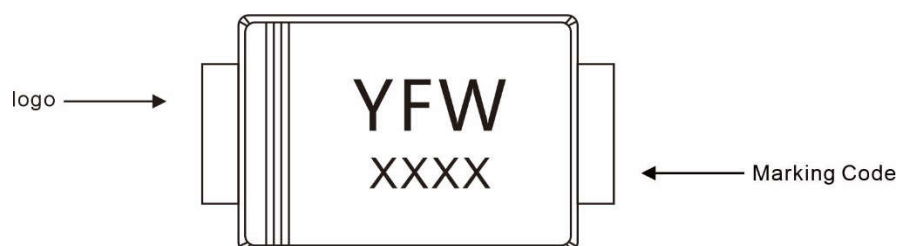


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram

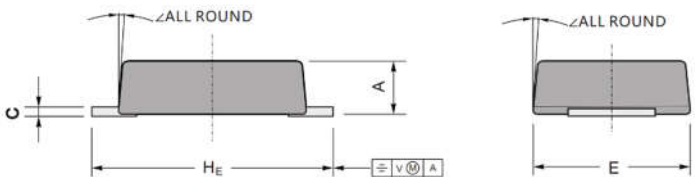
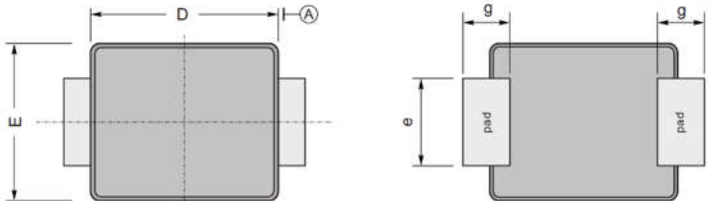


Ordering information

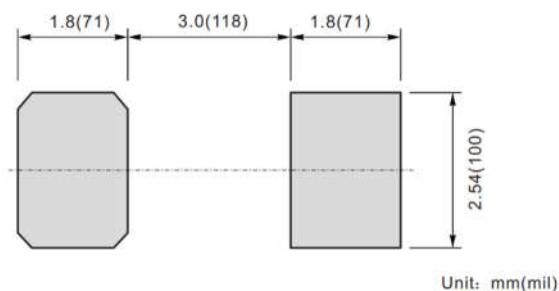
Package	Packing Description	Packing Quantity
SMBF	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

SMBF

	<table><tr><th rowspan="2">Dim.</th><th colspan="2">Millimeter(mm)</th><th colspan="2">mil</th></tr><tr><th>Min.</th><th>Max.</th><th>Min.</th><th>Max.</th></tr><tr><td>A</td><td>1.1</td><td>1.3</td><td>43</td><td>51</td></tr><tr><td>C</td><td>0.18</td><td>0.26</td><td>7</td><td>10</td></tr><tr><td>D</td><td>4.2</td><td>4.4</td><td>165</td><td>173</td></tr><tr><td>E</td><td>3.5</td><td>3.7</td><td>138</td><td>146</td></tr><tr><td>H_E</td><td>5.1</td><td>5.5</td><td>200</td><td>216</td></tr><tr><td>e</td><td>2.2</td><td>1.9</td><td>75</td><td>86</td></tr><tr><td>g</td><td colspan="2">1.0</td><td colspan="2">40</td></tr><tr><td>∠</td><td colspan="4">9°</td></tr></table>	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°			
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The recommended mounting pad size



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