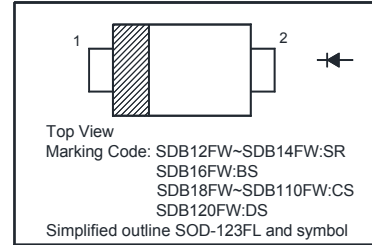


# SDB12FW THRU SDB120FW

**Surface Mount Schottky Barrier Rectifier**  
**Reverse Voltage - 20 to 200 V**  
**Forward Current - 1 A**

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



## Absolute Maximum Ratings and Characteristics

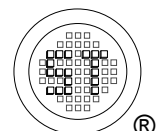
Ratings at  $T_a = 25^\circ\text{C}$  ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	SDB12FW	SDB14FW	SDB16FW	SDB18FW	SDB110FW	SDB120FW	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	200	V
Maximum RMS Voltage	$V_{RMS}$	14	28	42	56	80	141	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	200	V
Maximum Average Forward Rectified Current at $T_L = 75^\circ\text{C}$	$I_{F(AV)}$	1						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30						A
Maximum Forward Voltage at 1 A and $25^\circ\text{C}$	$V_F$	0.55		0.7		0.85		V
Maximum Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	$I_R$	0.1 10					0.002 10	mA
Typical Junction Capacitance	$C_J$	$110^{1)}$					$23^{2)}$	pF
Typical Thermal Resistance <sup>3)</sup>	$R_{\theta JA}$	75					132	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	- 55 to + 125						$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150						$^\circ\text{C}$

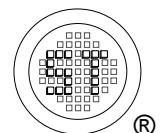
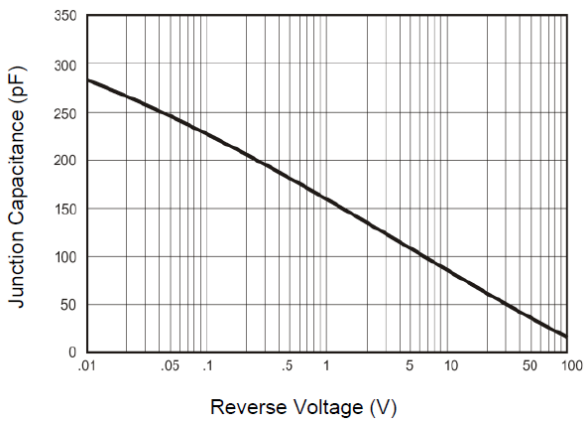
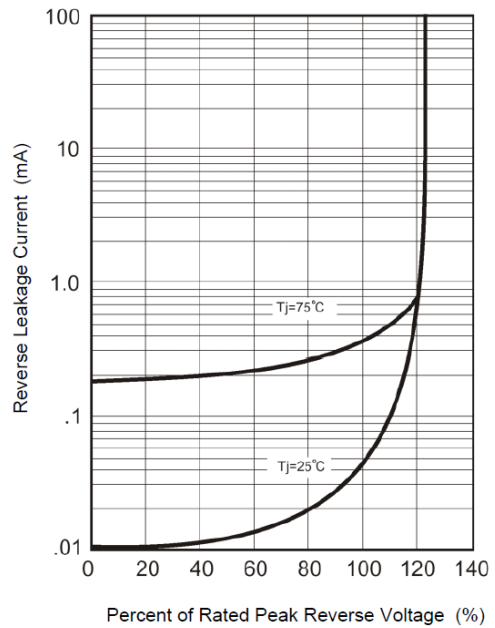
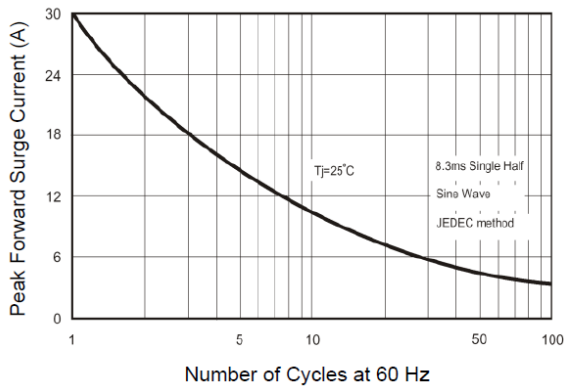
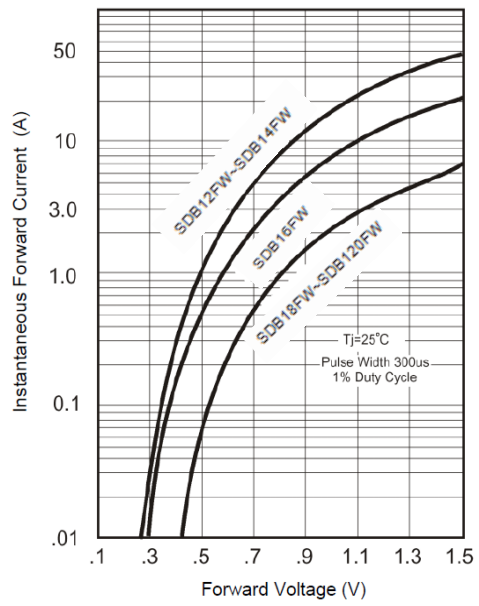
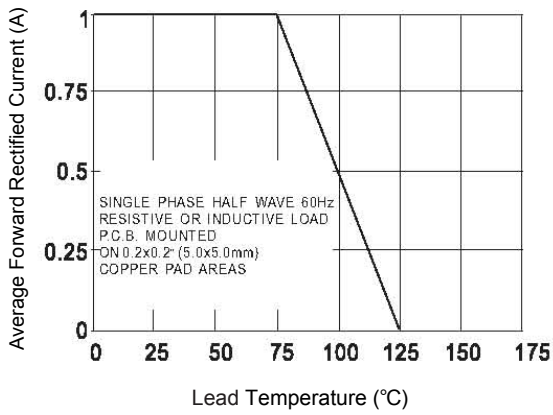
<sup>1)</sup> Measured at 1 MHz and applied reverse voltage of 4 V.

<sup>2)</sup> Measured at 1 MHz and applied reverse voltage of 5 V.

<sup>3)</sup> Thermal resistance junction to ambient 0.24" x 0.24" (6 x 6 mm) copper pads to each terminals



# SDB12FW THRU SDB120FW

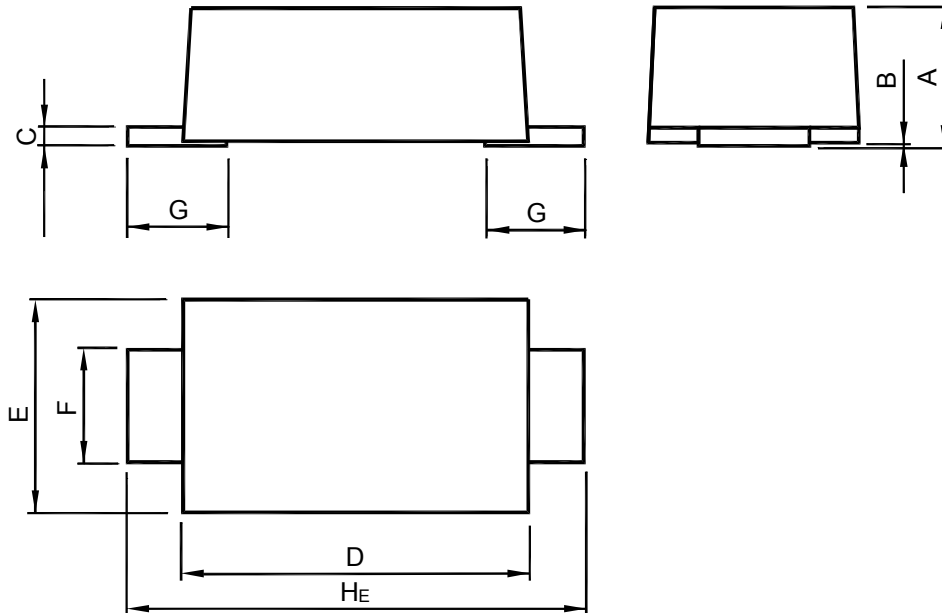


# SDB12FW THRU SDB120FW

## PACKAGE OUTLINE

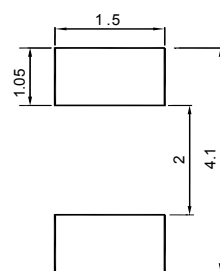
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H <sub>E</sub>
mm	1.08 0.88	0.1 0	0.2 0.1	2.9 2.7	1.9 1.7	1.1 0.8	0.85 0.45	3.9 3.5

## Recommended Soldering Footprint



## Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-123FL	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

