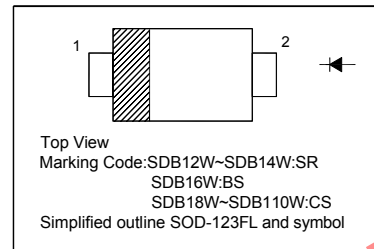


# SDB12W THRU SDB110W

**Surface Mount Schottky Barrier Rectifier**  
**Reverse Voltage - 20 to 100 V**  
**Forward Current - 1 A**

## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



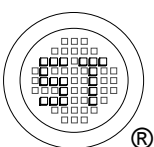
## Absolute Maximum Ratings and Characteristics

Ratings at 25 °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	SDB12W	SDB14W	SDB16W	SDB18W	SDB110W	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	V
Maximum RMS Voltage	$V_{RMS}$	14	28	42	56	80	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length	$I_{F(AV)}$	1					A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	40					A
Maximum Forward Voltage at 1 A and 25°C	$V_F$	0.55		0.7		0.85	V
Maximum Reverse Current at Rated DC Blocking Voltage	$I_R$	0.3 10					mA
Typical Junction Capacitance <sup>1)</sup>	$C_J$	110					pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	75					°C/W
Operating Junction Temperature Range	$T_j$	- 55 to + 125		- 55 to + 150			°C
Storage Temperature Range	$T_{stg}$	- 55 to + 150					°C

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

<sup>2)</sup> Thermal resistance junction to ambient 0.24" X 0.24"(6 X 6 mm) copper pads to each terminals



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# SDB12W THRU SDB110W

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

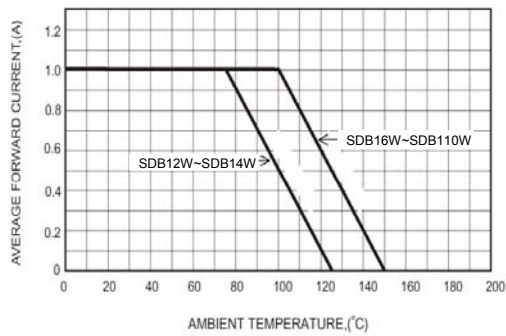


FIG.2-TYPICAL FORWARD CHARACTERISTICS

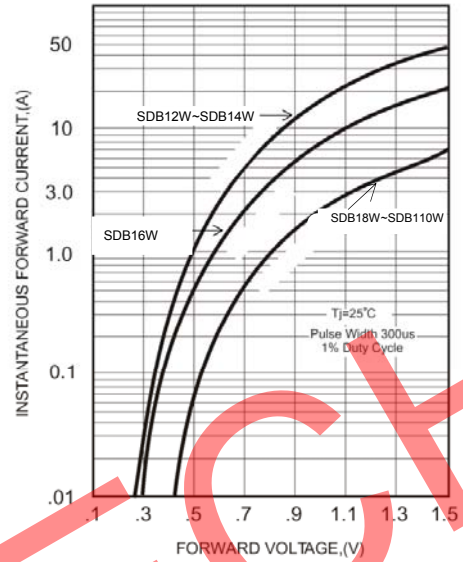


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

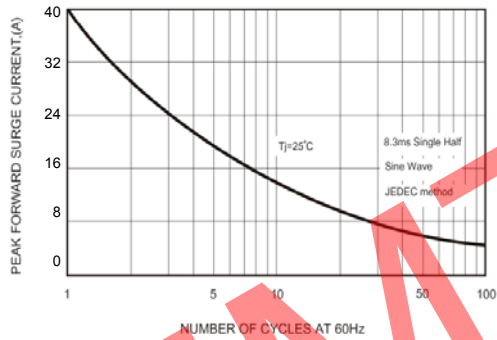


FIG.4-TYPICAL JUNCTION CAPACITANCE

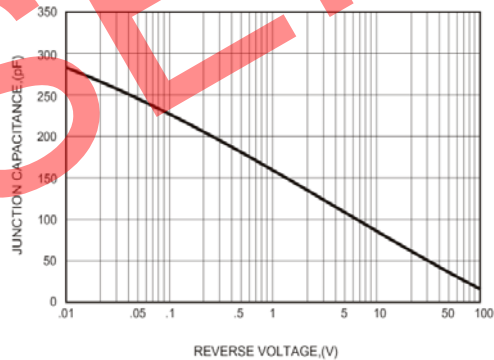
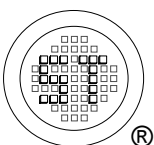
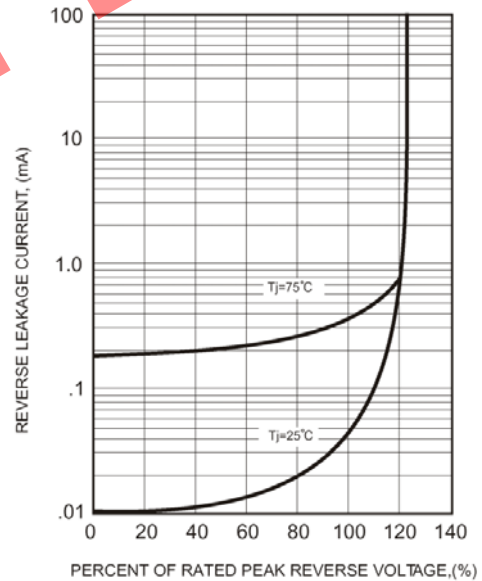


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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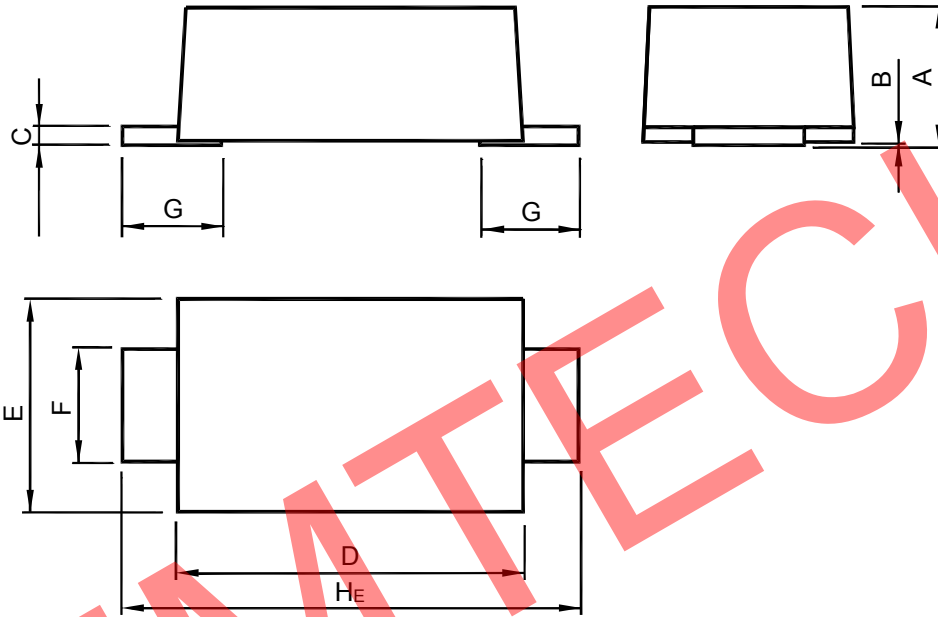


# SDB12W THRU SDB110W

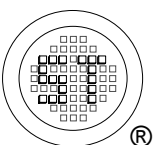
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H <sub>E</sub>
	1.08	0.1	0.2	2.9	1.9	1.1	0.9	3.9
mm	0.88	0	0.1	2.6	1.7	0.8	0.7	3.5



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Dated: 06/07/2013 Rev: 02