

SDB32W THRU SDB320W

Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 20 to 200 V

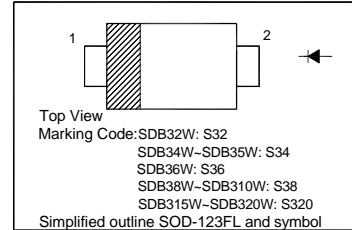
Forward Current - 3 A

Features

- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	SDB32W	SDB34W	SDB35W	SDB36W	SDB38W	SDB310W	SDB315W	SDB320W	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	45	60	80	100	150	200	V
Maximum DC Blocking Voltage	V_{DC}	20	40	45	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3								A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	80								A
Maximum Instantaneous Forward Voltage at 3 A	V_F	0.52	0.55	0.65	0.85	0.9				V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	I_R	0.05								mA
		20				10				
Operating Junction Temperature Range	T_j	- 55 to + 125				- 55 to + 150				°C
Storage Temperature Range	T_{stg}	- 55 to + 150								°C

TOP DYNAMIC

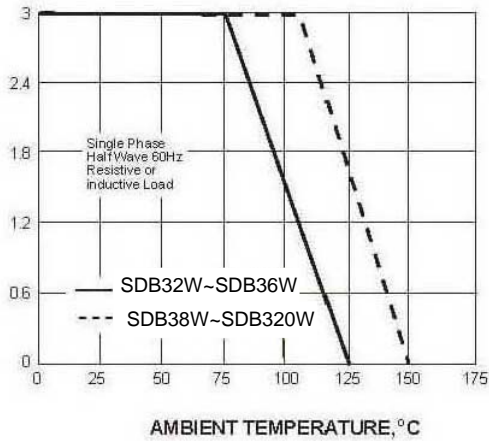


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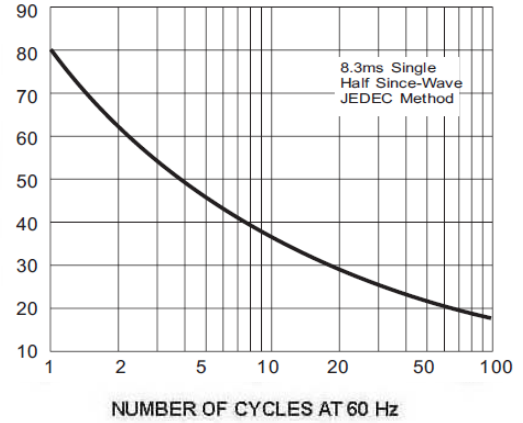
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



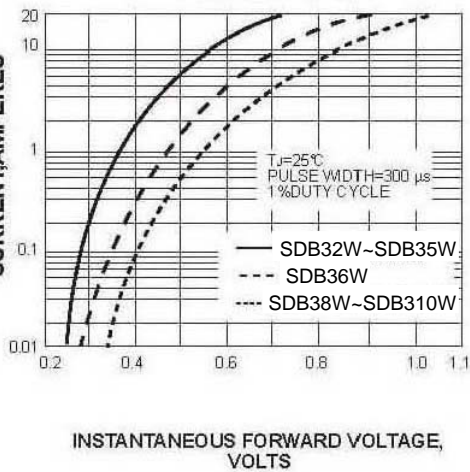
PEAK FORWARD SURGE CURRENT, AMPERES

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



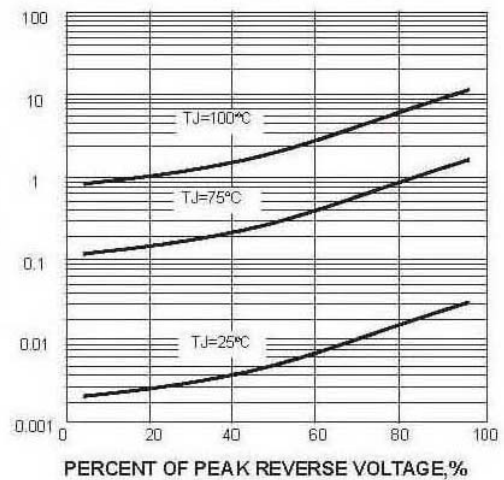
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



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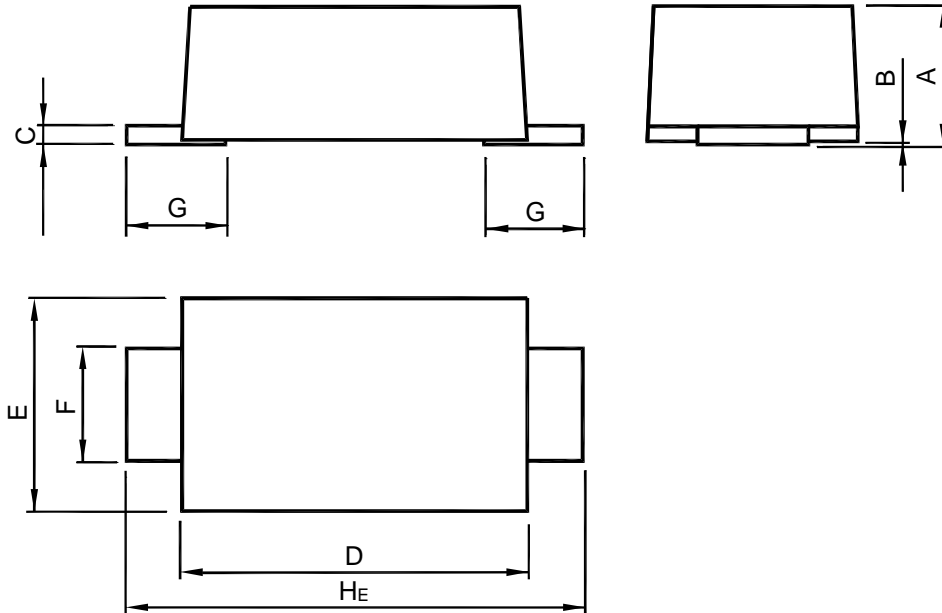


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PACKAGE OUTLINE

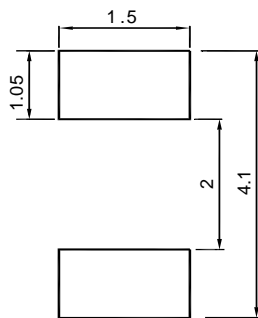
Plastic surface mounted package; 2 leads

SOD-123FL



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

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