

SDB22FW THRU SDB220FW

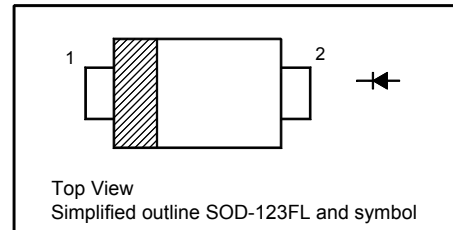
Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 20 to 200 V

Forward Current - 2 A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

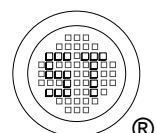


Maximum Ratings and Electrical Characteristics

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

Parameter	Symbols	SDB22 FW	SDB24 FW	SDB26 FW	SDB28 FW	SDB210 FW	SDB212 FW	SDB215 FW	SDB220 FW	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2								A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50								A
Maximum Instantaneous Forward Voltage at 2 A	V_F	0.55	0.7	0.85		0.9			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1					0.03			mA
		20		10		5				
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	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

¹⁾ P.C.B mounted with 0.2 X 0.2"(5 X 5 mm) copper pad areas.



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Electrical Characteristic Curves

Fig 1. Reverse Characteristic Curve

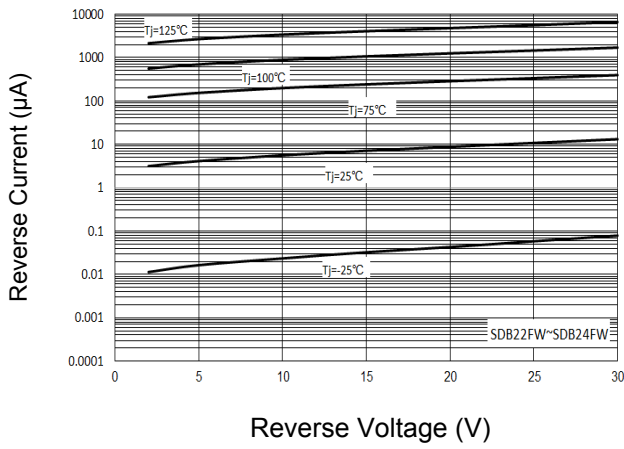


Fig 2. Reverse Characteristic Curve

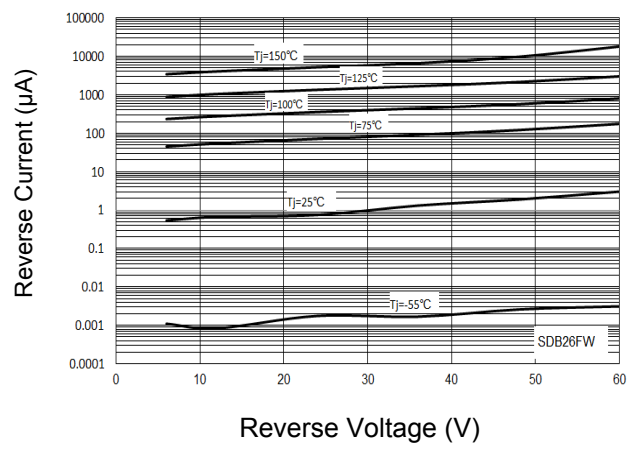


Fig 3. Reverse Characteristic Curve

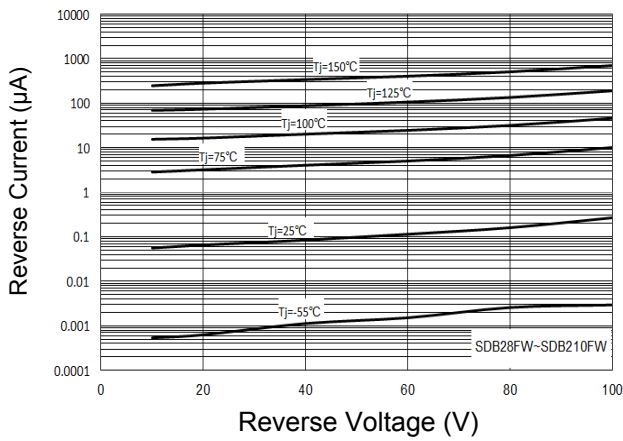


Fig 4. Forward Characteristic

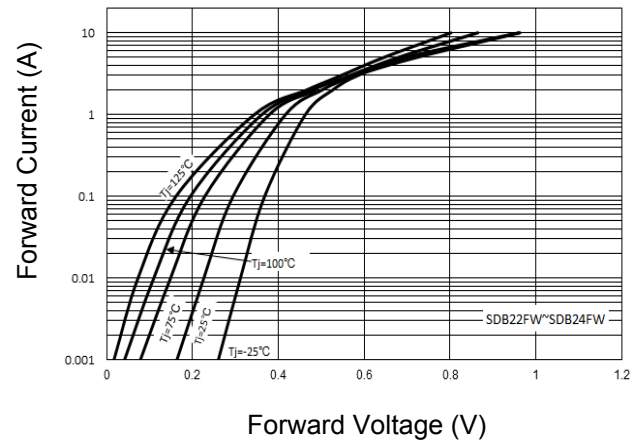


Fig 5. Forward Characteristic

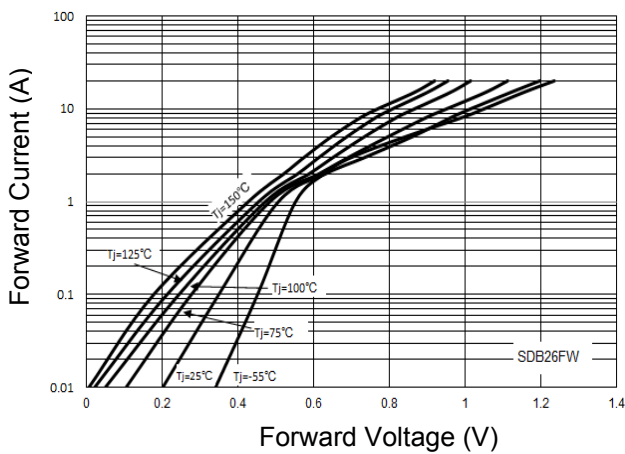
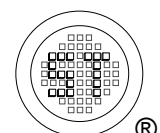
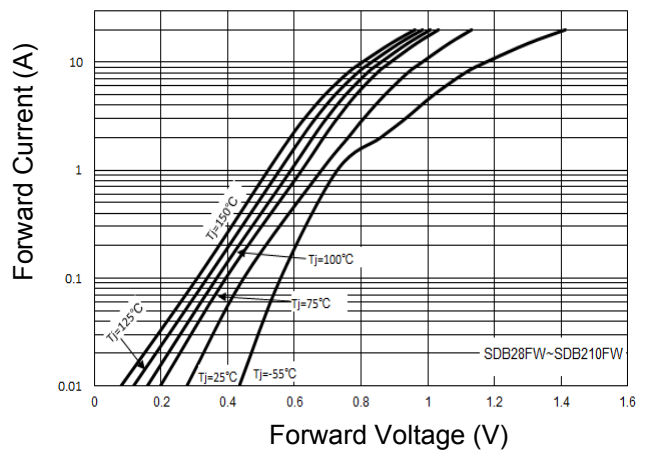


Fig 6. Forward Characteristic



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Electrical Characteristic Curves

Fig 7. Junction Capacitance

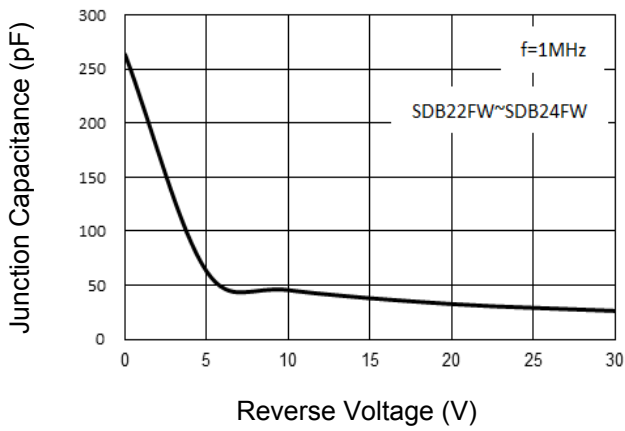


Fig 8. Junction Capacitance

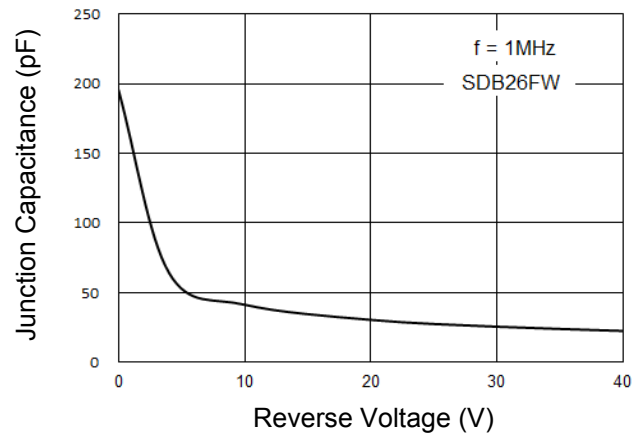


Fig 9. Junction Capacitance

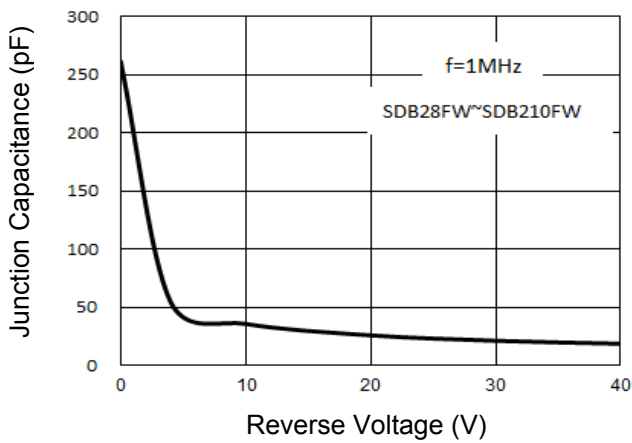
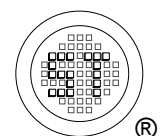
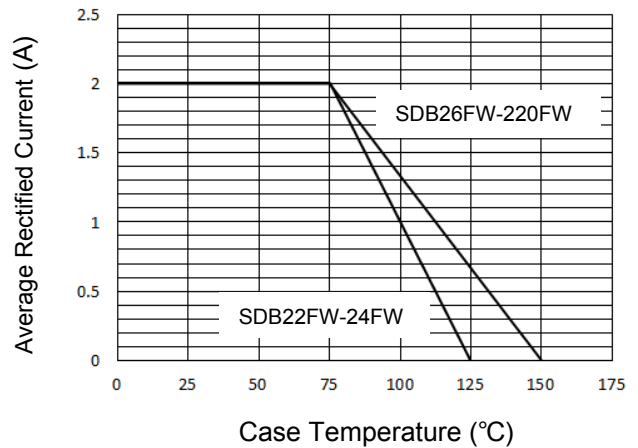


Fig 10. Average Rectified Current Derating Curve

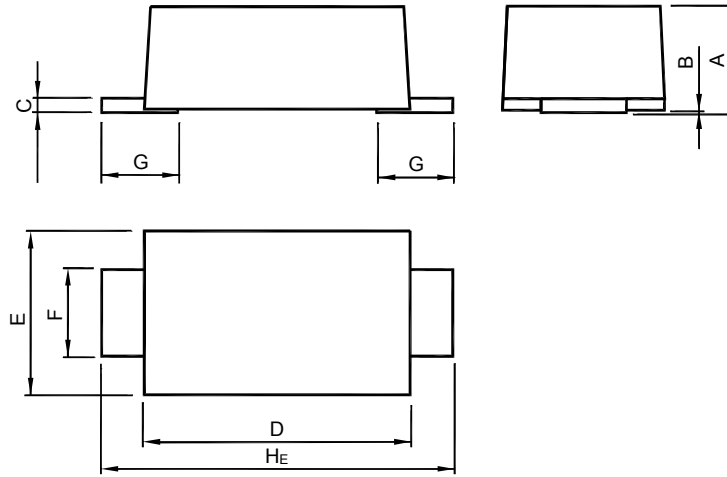


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PACKAGE OUTLINE

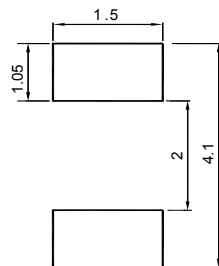
Plastic surface mounted package; 2 leads

SOD-123FL



UNIT	A	B	C	D	E	F	G	H _E
mm	1.08 0.88	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

Marking information

" III " = Cathode line

" *** " = Part No.

SDB22FW-24FW : S24

SDB26FW : S26

SDB28FW-210FW : S10

SDB212FW-215FW : S15

SDB220FW : S20

Font type: Arial

