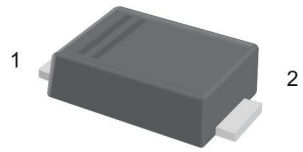
SB12FL~SB120FL
Schottky Barrier Diodes

Features

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

SOD-123FL



Marking Code:

SB12FL : S12
SB14FL : S14
SB16FL : S16
SB18FL : S18
SB110FL : S110
SB112FL : S112
SB115FL : S115
SB120FL : S120

Maximum Ratings and Electrical Characteristics

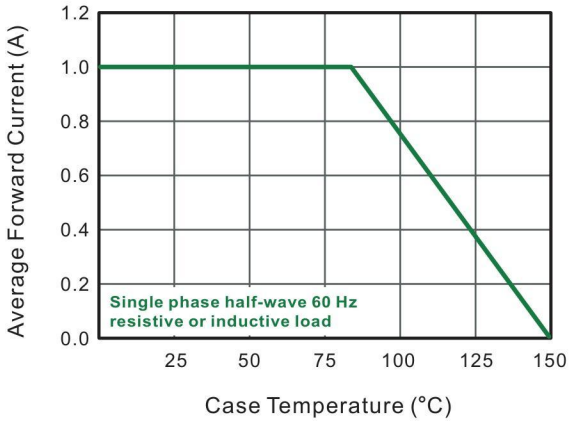
Ratings at 25℃ ambient temperature unless otherwise specified.

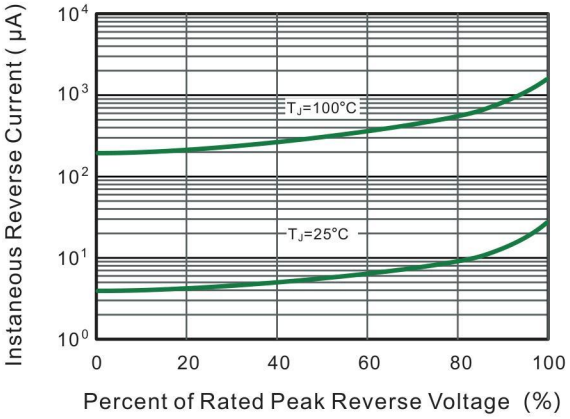
Parameter	Symbol	SB12FL	SB14FL	SB16FL	SB18FL	SB110FL	SB112FL	SB115FL	SB120FL	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	25								A
Maximum Instantaneous Forward Voltage at 1 A	V_F	0.55		0.70		0.85		0.90		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_A = 25 °C T_A = 100 °C	I_R	0.3 10				0.2 5		0.1 2		mA
Typical Junction Capacitance Note1	C_j	110		80						pF
Typical Thermal Resistance Note2	$R_{\theta JA}$	100								°C/W
Operating Junction Temperature Range	T_J	-55 to +150								°C
Storage Temperature Range	T_{STG}	-55 to +150								°C

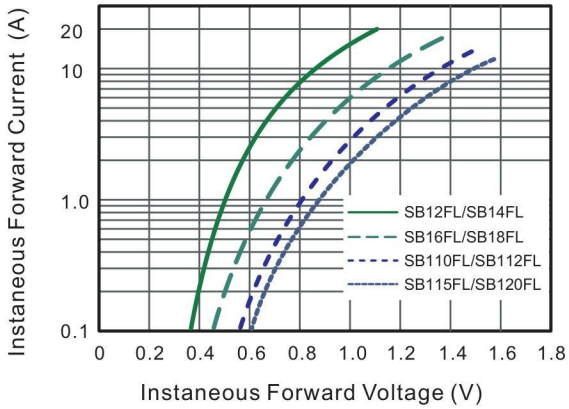
Note:

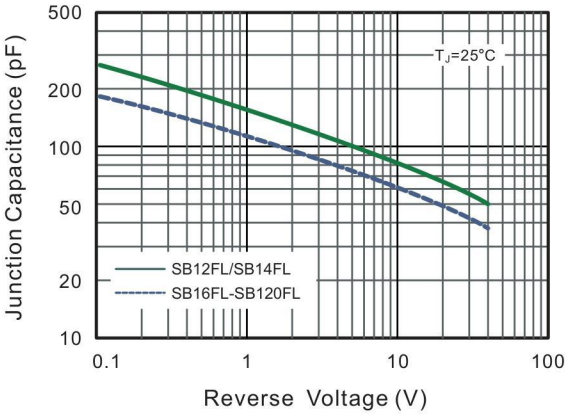
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

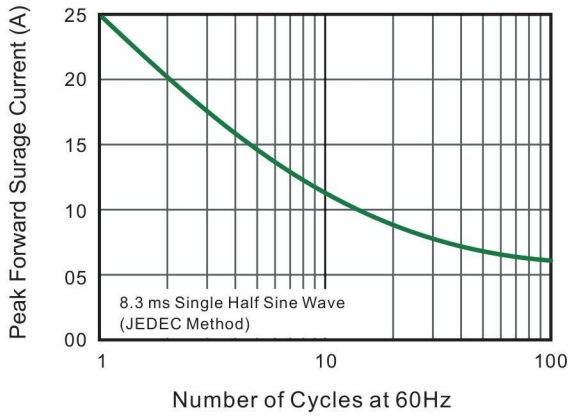
Typical Characteristic Curves

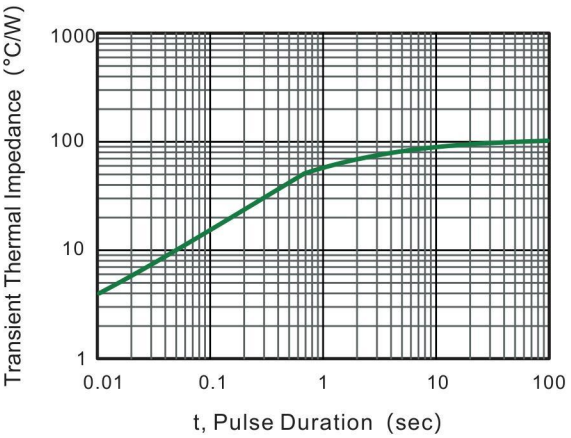








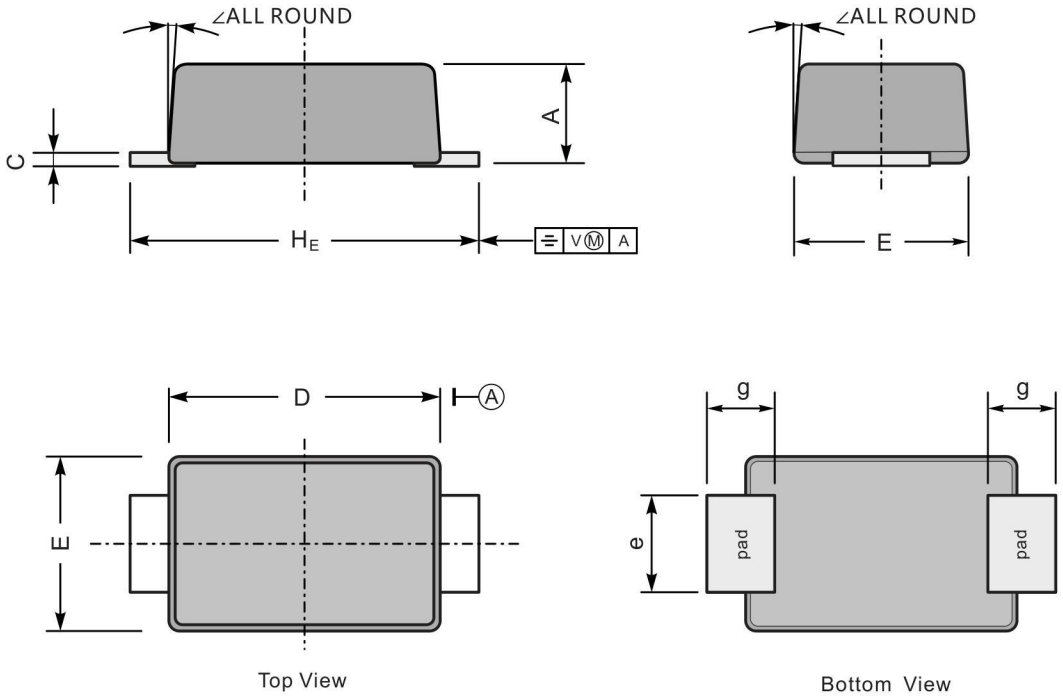




Package Outline

SOD-123FL

Dimensions in mm



UNIT		A	C	D	E	e	g	HE	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	