

SDB140W

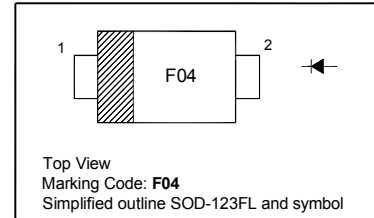
Surface Mount Schottky Barrier Diode

Features

- Lower power loss, high efficiency
- High surge capability
- High current capability and low forward voltage drop

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	40	V
DC Blocking Voltage	V_R	40	V
Average Forward Rectified Current	$I_{F(AV)}$	1.1	A
Non-repetitive Peak Forward Surge Current (at $t = 8.3$ ms)	I_{FSM}	40	A
Power Dissipation	P_{tot}	556	mW
Operating Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 500$ mA at $I_F = 1.1$ A	V_F	- -	- -	0.51 0.6	V
Reverse Breakdown Voltage at $I_R = 20$ μA	$V_{(BR)R}$	40	-	-	V
Reverse Current at $V_R = 40$ V	I_R	-	-	20	μA
Total Capacitance at $V_R = 10$ V, $f = 1$ MHz	C_T	-	28	-	pF

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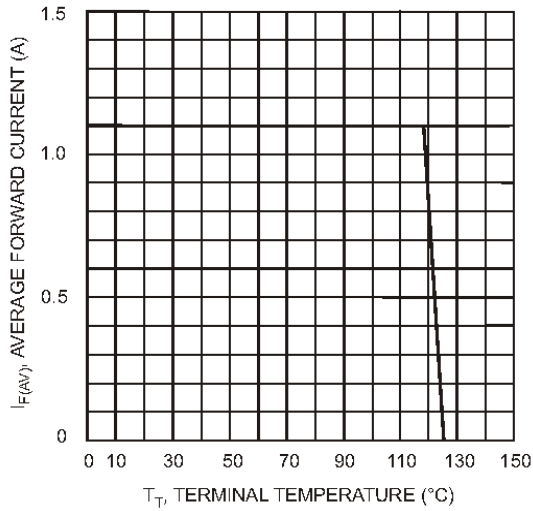


Fig. 1, Forward Current Derating Curve

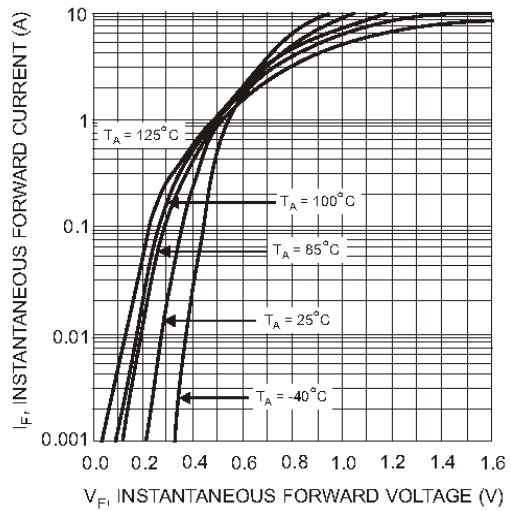


Fig. 2, Typical Forward Characteristics

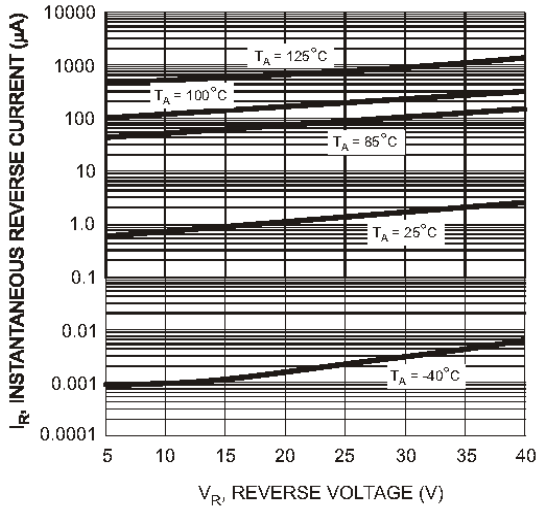


Fig. 3, Typical Pulsed Reverse Characteristics

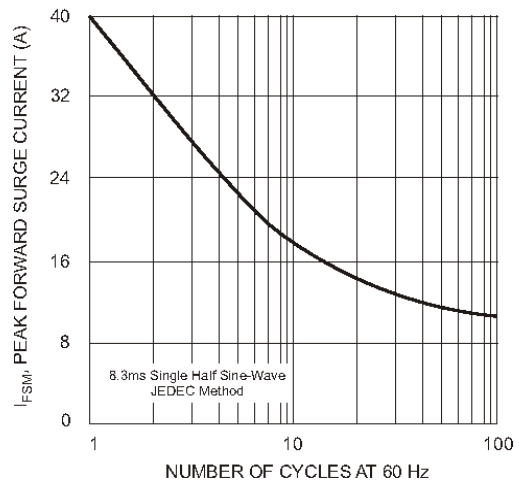


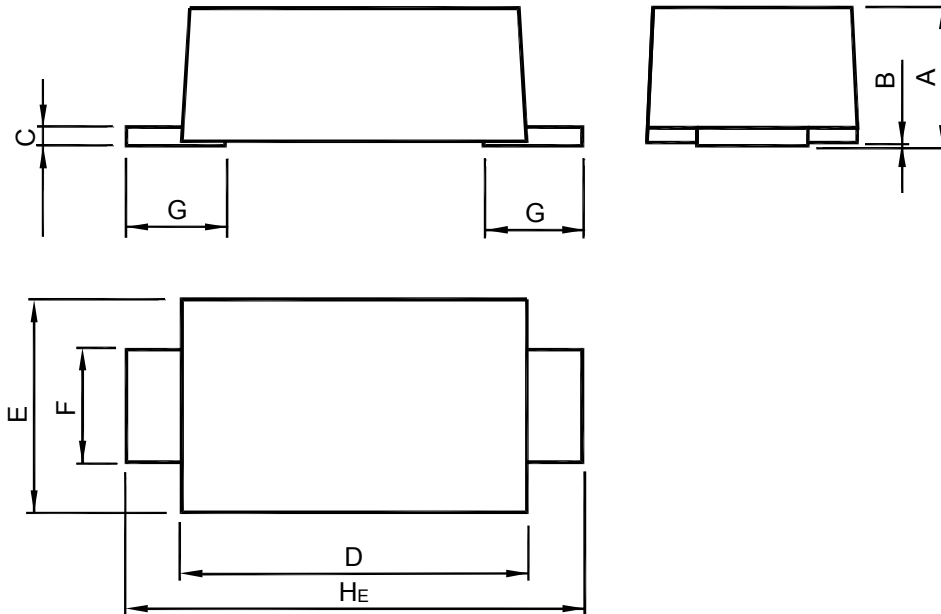
Fig. 4, Maximum Non-Repetitive Peak Forward Surge Current

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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

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