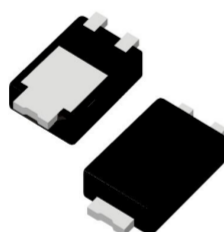


Features

- Multilayer Metal -Silicon Potential Structure
- High Current Capability, High Efficiency
- High Junction Temperature Capability
- Low Leakage Current
- RoHs Product



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Applications

- surface mount schottky barrier rectifier
- Buck and Boost dc-dc Converters
- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Invers Circuit
- Low Voltage Continued Circuit and Protection Circuit



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	VRRM	45	V
Maximum DC blocking voltage	V _{DC}	45	V
RMS Reverse voltage	V _{RMS}	32	V
Forward Current (DC)	I _F	10	A
Forward Surge Current (60 Hz @ 1 cycle)	I _{FSM}	150	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Typical Thermal Resistance per leg @TA = 25°C	R _{θJA}	60	°C/W
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Mounted onto a 4 in square FR-4 board 10 mm sq. 1 oz. Cu 0.06" thick single sided. Operating to steady state.

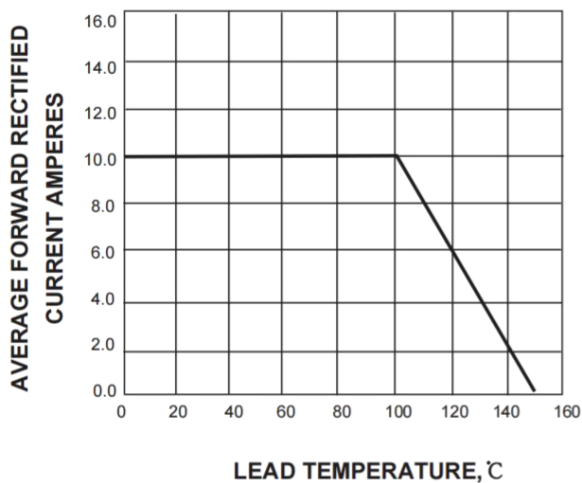
Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	V _F *	--	--	0.55	V	I _F =10A
Reverse Leakage	I _R **	--	--	0.5	mA	TA=25°C
		--	--	15	mA	TA=100°C
Total Capacitance	C _T	--	80	--	pF	VR = 5.0 V, f = 1 MHz

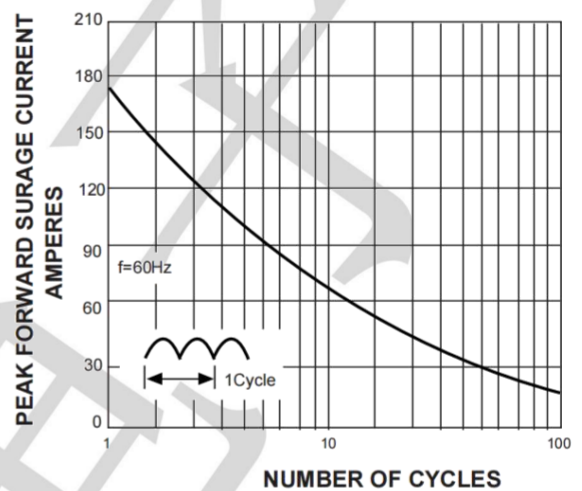
*Pulse width ≤380 uS, Duty cycle < 2%; **pulse test , tp≤5ms

Typical Electrical Characteristic Curves

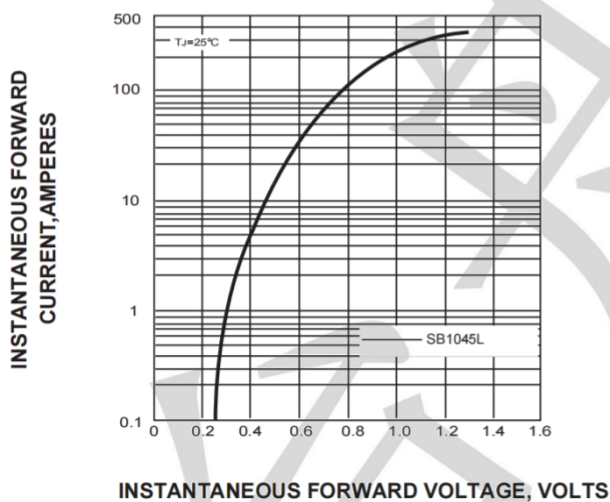
DERATING CURVE OUTPUT RECTIFIED CURRENT



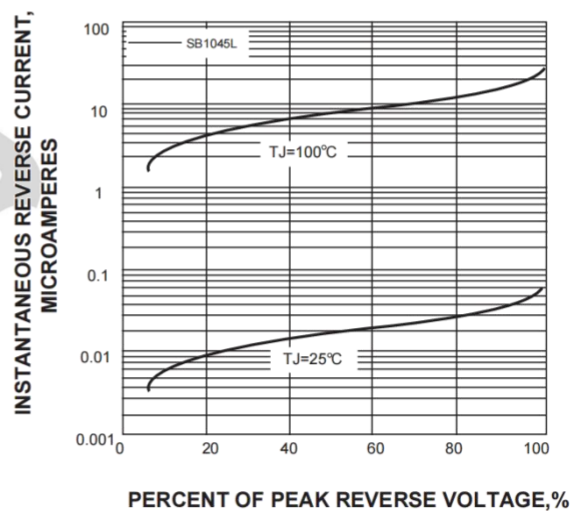
MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG



TYPICAL FORWARD VOLTAGE CHARACTERISTICS

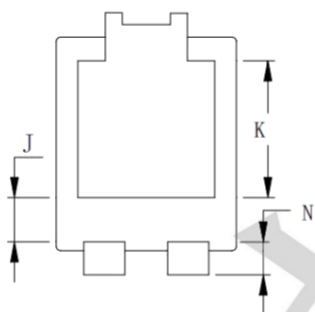
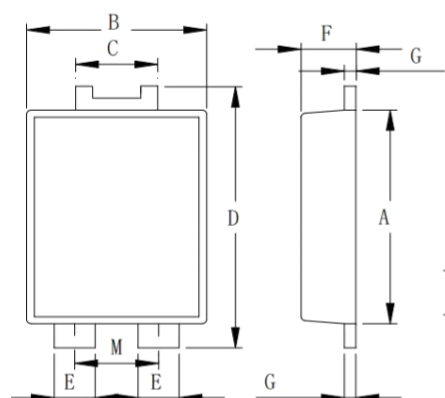


TYPICAL REVERSE LEAKAGE CHARACTERISTICS



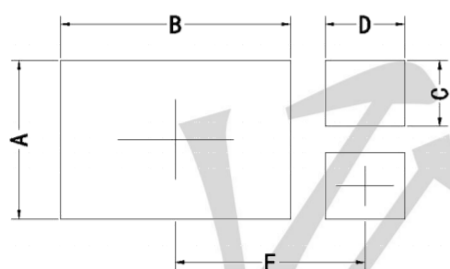
Package Outline Dimensions (unit: mm)

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Symbol	Dimensions in Millimeters	
	Min	Max
A	5.2	5.8
B	3.8	4.3
C	1.7	1.9
D	6.4	6.6
E	0.8	1.0
F	1.0	1.3
G	0.2	0.45
J	1.1	1.5
K	2.4	4.0
M	1.65	1.95
N	0.7	1.3

Mounting Pad Layout (unit: mm)



Symbol	Unit (mm)	Unit (inch)
A	3.60	0.142
B	5.35	0.211
C	1.50	0.059
D	1.85	0.073
E	4.30	0.169