SIRECT ELECTRONIC

SBL10B60IH/DH

Power Schottky Rectifier - 10Amp 60Volt

☐ Features

-Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
-High Junction Temperature Capability
-Low forward voltage, high current capability
-High surge capacity
-Low power loss, high efficiency
-Halogen-Free

☐ Application

-Switching-Mode Power Supply
-Solar-System Control Box

☐ Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
$I_{F(AV)}$	10	A	Average Forward Current
V_{RRM}	60	V	Repetitive Peak Reverse Voltage
I_{FSM}	120	A	Peak Forward Surge Current
V_F	0.55	V	Forward Voltage Drop
T_j , T_{stg}	-50 to +150	ºC	Operating and Storage Temperature

☐ Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V_F	0.65V 0.55V	Per Leg at I_F = 5A Tc = 25ºC Tc = 125ºC
Maximum Reverse Leakage Current	I_R	1.0mA	Per Leg at V_R = 60V Tc = 25ºC
Typical Thermal Resistance,Junction to Case	$R_{\theta (j-c)}$	7 ºC/W	Per Leg TO-251 / TO-252

Note : 1.Mounted on P.C.B with copper pad size 20mm x 30mm, thickness 1.5mm
2.Reverse Surge 3.0A @ 0.004ms, 10 cycle
3.Repetitive Peak Reverse Current (I_{RRM}) 0.5A @ Per Leg at tp = 2μs, 1kHz

December 2018 / Rev.7.2

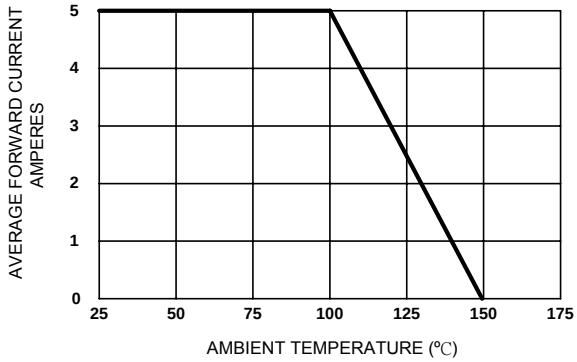

Figure 1. Forward Current Derating Curve

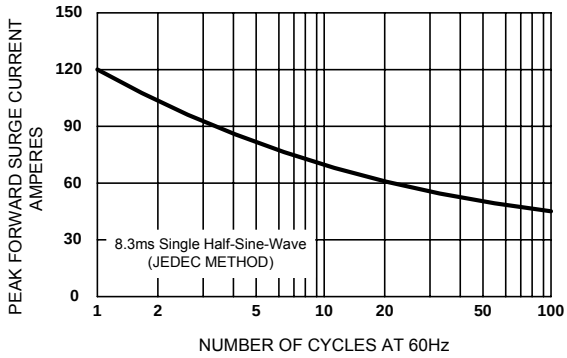

Figure 2. Maximum Non-repetitive Surge Current

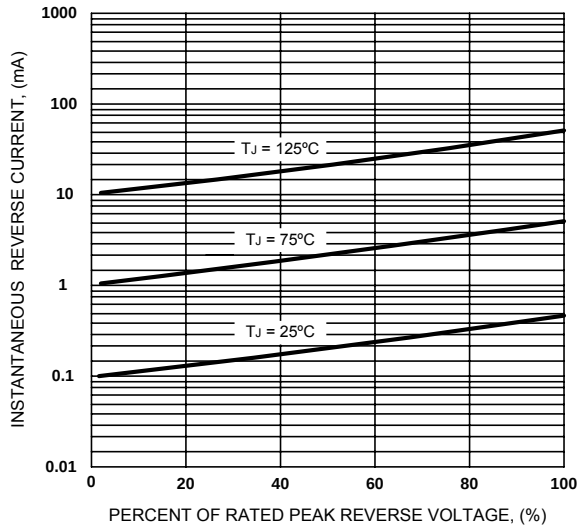

Figure 3. Typical Reverse Characteristics

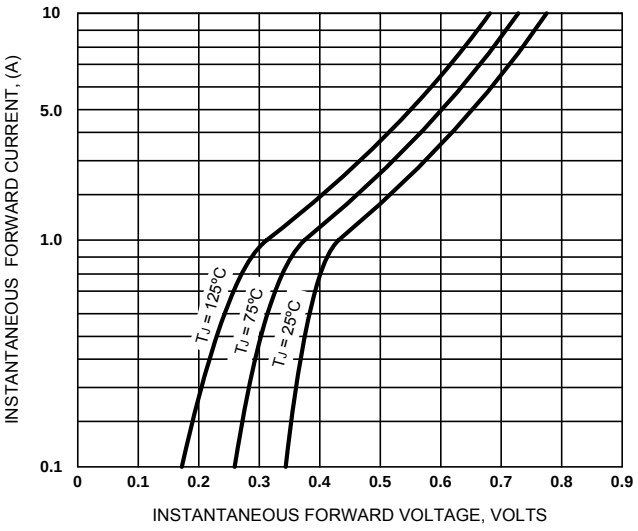

Figure 4. Typical Forward Characteristics

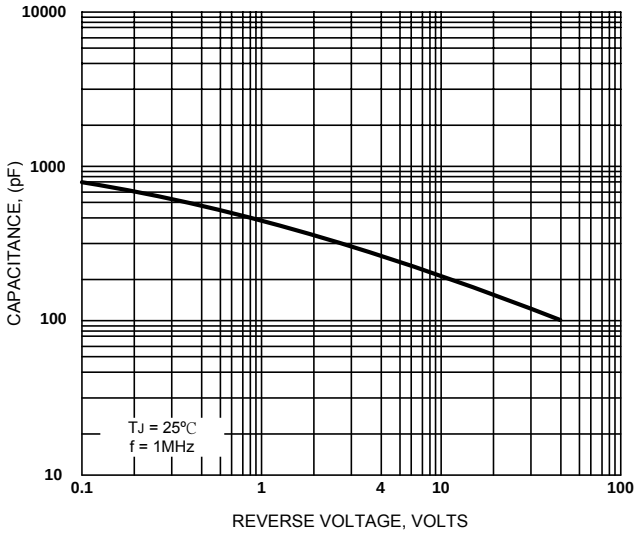

Figure 5. Typical Junction Capacitance

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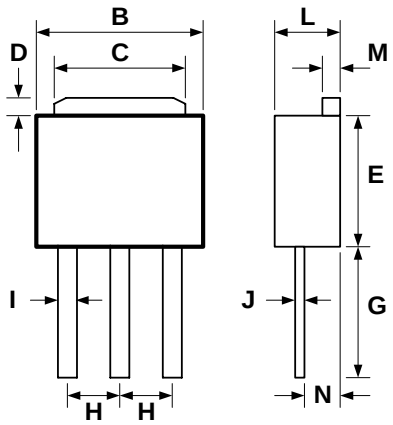

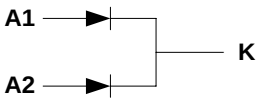

DIMENSIONS					
DIM	INCHES		MILLIMETERS		NOTE
	MIN	MAX	MIN	MAX	
B	.250	.266	6.35	6.75	
C	.201	.217	5.10	5.50	
D	.033	.053	0.85	1.35	
E	.228	.248	5.80	6.30	
G	.209	.228	5.30	5.80	
H	.085	.096	2.15	2.45	
I	.030	.041	0.75	1.05	
J	.016	.024	0.40	0.60	
L	.083	.098	2.10	2.50	
M	.018	.026	0.45	0.65	
N	.031	.051	0.80	1.30	

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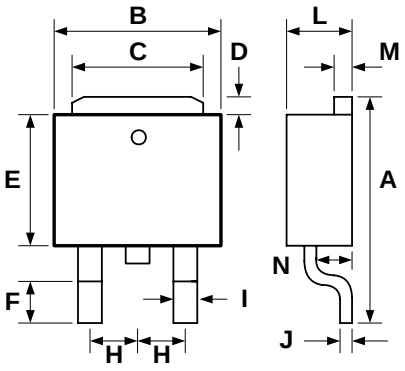

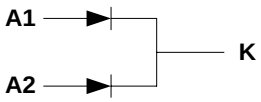

DIMENSIONS					
DIM	INCHES		MILLIMETERS		NOTE
	MIN	MAX	MIN	MAX	
A	.380	.400	9.65	10.15	
B	.250	.266	6.35	6.75	
C	.201	.217	5.10	5.50	
D	.033	.053	0.85	1.35	
E	.228	.248	5.80	6.30	
F	.049	.065	1.25	1.65	
H	.085	.096	2.15	2.45	
I	.030	.041	0.75	1.05	
J	.016	.024	0.40	0.60	
L	.083	.098	2.10	2.50	
M	.018	.026	0.45	0.65	
N	.031	.051	0.80	1.30	

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