

## Power Schottky Rectifier - 16Amp 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**

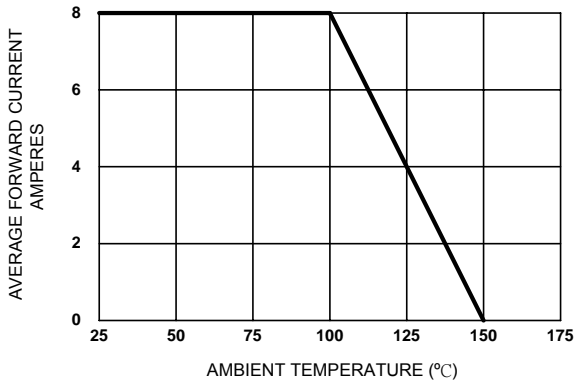
Symbol	Ratings	Unit	Conditions
$I_F(AV)$	16	A	Average Forward Current
$V_{RRM}$	60	V	Repetitive Peak Reverse Voltage
$I_{FSM}$	150	A	Peak Forward Surge Current
$V_F$	0.60	V	Forward Voltage Drop
$T_j, T_{stg}$	-50 to +150	°C	Operating and Storage Temperature

**Electrical characteristics**

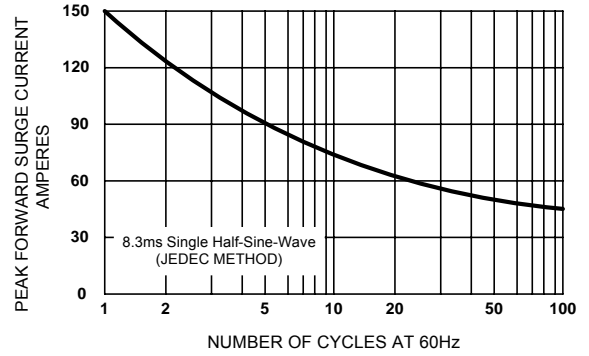
Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	$V_F$	0.70V	Per Leg at $I_F = 8A$ $T_c = 25^\circ C$
		0.60V	$T_c = 125^\circ C$
Maximum Reverse Leakage Current	$I_R$	1.0mA	Per Leg at $V_R = 60V$ $T_c = 25^\circ C$
Typical Thermal Resistance, Junction to Case	$R_{\theta(j-c)}$	7 °C/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 (IRRM) 0.5A @ Per Leg at  $t_p = 2\mu s$ , 1kHz

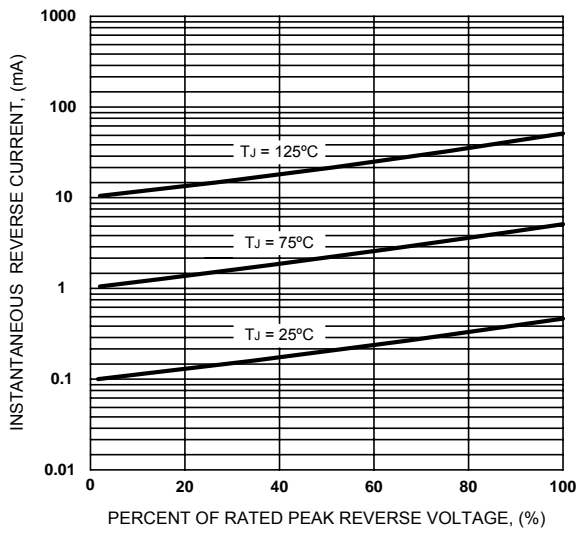
December 2018 / Rev.7.2



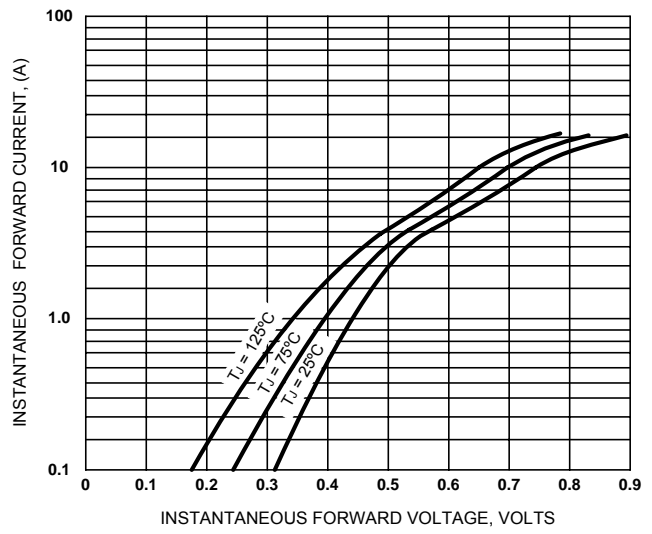
**Figure 1. Forward Current Derating Curve**



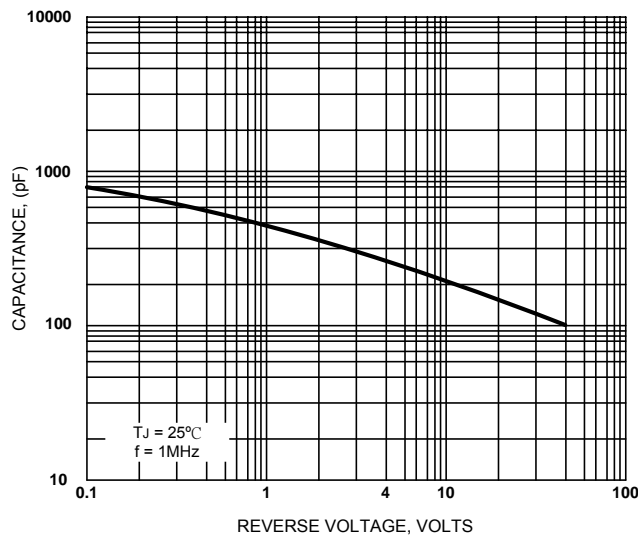
**Figure 2. Maximum Non-repetitive Surge Current**



**Figure 3. Typical Reverse Characteristics**



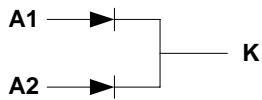
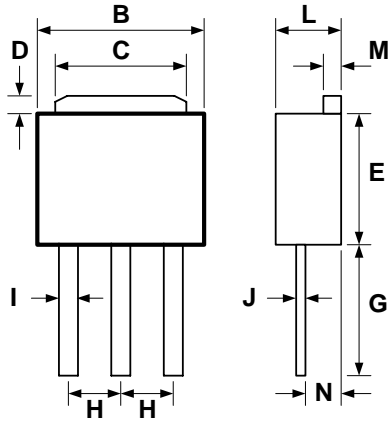
**Figure 4. Typical Forward Characteristics**



**Figure 5. Typical Junction Capacitance**

**SBL16B60IH**

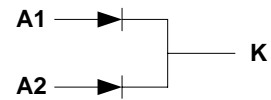
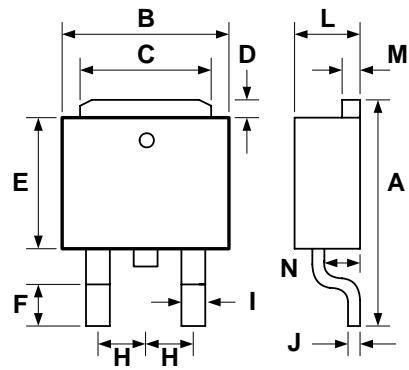
**T0-251**



DIM	DIMENSIONS				NOTE
	INCHES		MILLIMETERS		
	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	

**SBL16B60DH**

**T0-252**



DIM	DIMENSIONS				NOTE
	INCHES		MILLIMETERS		
	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	

IMPORTANT NOTICE:

Sirect and Sirectsemi are registered trademarks of Sirect Semiconductor Incorporated. Sirect reserved the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase and use.

Products described herein may be covered by one or more United States, China, Taiwan or foreign patents pending.

Sirect products are not authorized for use as critical components in life support devices or system without express written approval of Sirect.

Sirect Semiconductor Incorporated does not warrant or accept any liability whatsoever in respect of any products purchased through unauthorized sales channel. Should customers purchase or use Sirect products for any unintended or unauthorized application, customers shall indemnify and hold Sirect and its representatives harmless against all claims, damages, expenses, and attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized application.

© Sirect Semiconductor Incorporated