

Power Schottky Rectifier - 5Amp 45Volt

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

Application

- Switching-Mode Power Supply

Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
I _{F(AV)}	5	A	Average Forward Current
V _{RRM}	45	V	Repetitive Peak Reverse Voltage
I _{FSM}	150	A	Peak Forward Surge Current
V _F	0.3	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	0.40V	Per Leg at I _F = 5A T _c = 25°C
		0.30V	T _c = 125°C
Maximum Reverse Leakage Current	I _R	1.0mA	Per Leg at V _R = 45V T _c = 25°C
Typical Thermal Resistance, Junction to Case	R _{θ(j-c)}	2.2 °C/W	Per Leg TO-220AB
		4.5 °C/W	ITO-220AB

- 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 tp = 2μs, 1kHz

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SBL05L40C/FC

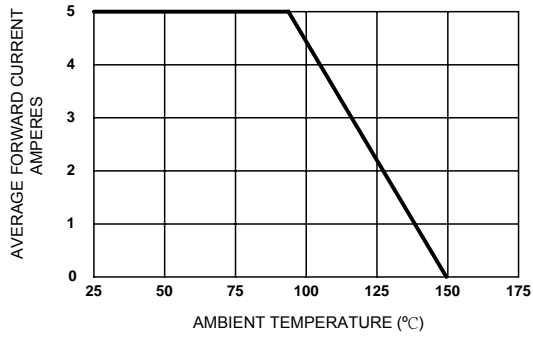


Figure 1. Forward Current Derating Curve

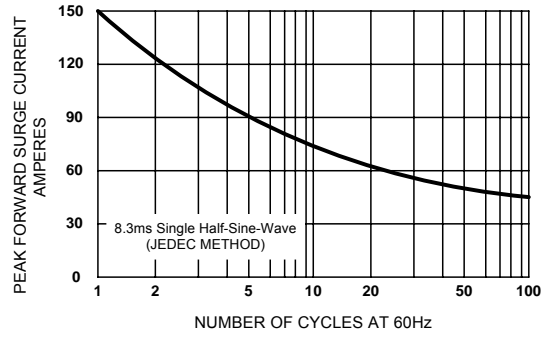


Figure 2. Maximum Non-repetitive Surge Current

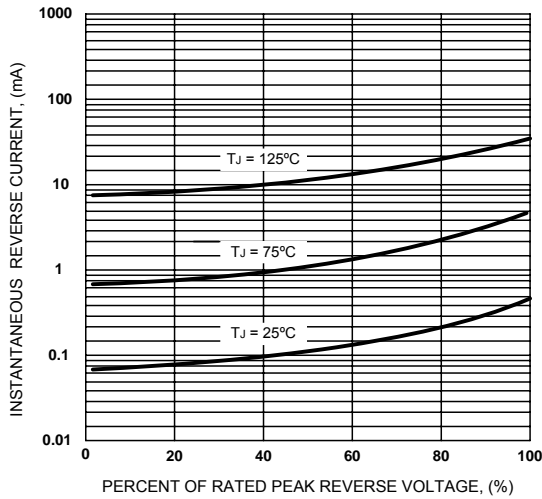


Figure 3. Typical Reverse Characteristics

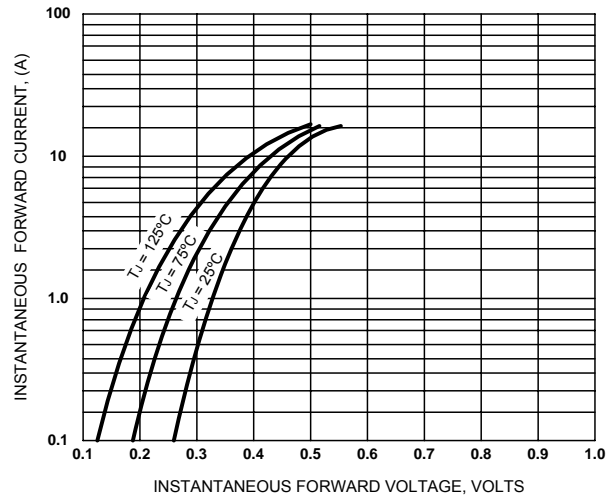


Figure 4. Typical Forward Characteristics

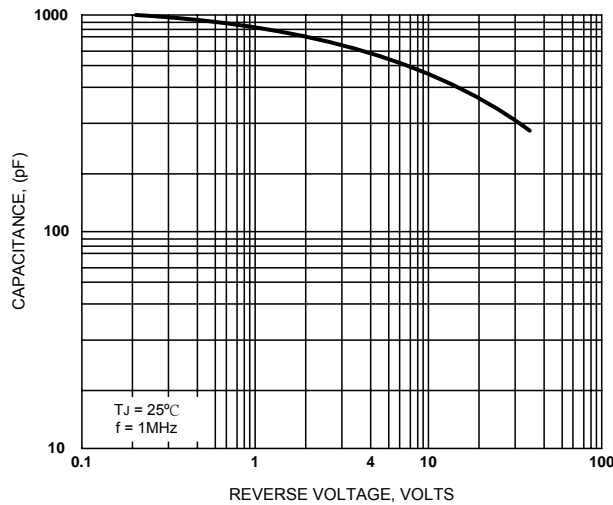


Figure 5. Typical Junction Capacitance



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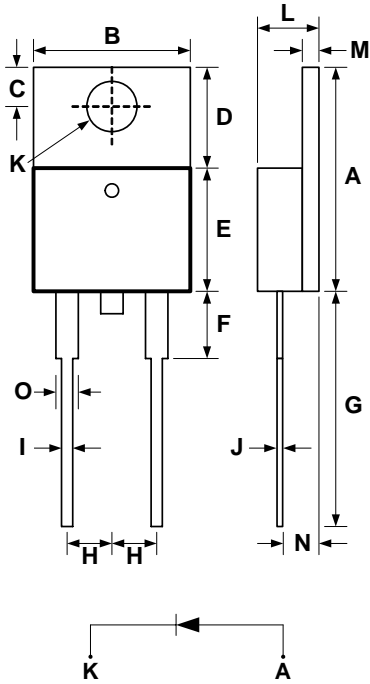
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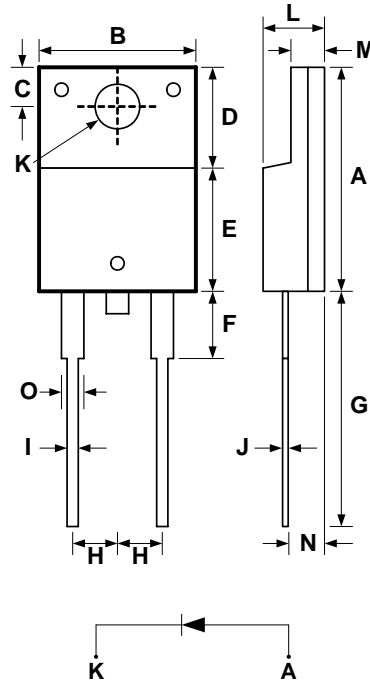
TO-220AC



DIMENSIONS					
DIM	INCHES		MILLIMETERS		NOTE
	MIN	MAX	MIN	MAX	
A	.593	.612	15.05	15.55	
B	.392	.411	9.95	10.45	
C	.104	.116	2.65	2.95	
D	.244	.264	6.20	6.70	
E	.339	.358	8.60	9.10	
F	.154	.173	3.90	4.40	
G	.539	.559	13.70	14.20	
H	.096	.108	2.45	2.75	
I	.028	.037	0.70	0.95	
J	.012	.020	0.30	0.50	
K	.146	.157	3.70	4.00	
L	.175	.187	4.45	4.75	
M	.045	.057	1.15	1.45	
N	.098	.114	2.50	2.90	
O	.047	.057	1.20	1.45	

SBL05L40FC

ITO-220AC



DIMENSIONS					
DIM	INCHES		MILLIMETERS		NOTE
	MIN	MAX	MIN	MAX	
A	.585	.604	14.85	15.35	
B	.386	.406	9.80	10.30	
C	.100	.112	2.55	2.85	
D	.250	.270	6.35	6.85	
E	.325	.344	8.25	8.75	
F	.132	.152	3.35	3.85	
G	.520	.539	13.20	13.70	
H	.096	.108	2.45	2.75	
I	.020	.028	0.50	0.70	
J	.020	.028	0.50	0.70	
K	.120	.132	3.05	3.35	
L	.169	.185	4.30	4.70	
M	.114	.130	2.90	3.30	
N	.098	.114	2.50	2.90	
O	.043	.055	1.10	1.40	