



Micro Commercial Components  
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# SBL1020 THRU SBL10100

## 10 Amp Schottky Barrier Rectifier 20 to 100 Volts

### Features

- Low Power Loss
- High Efficiency
- Low Forward Voltage
- High surge capacity
- High Current Capability

### Maximum Ratings

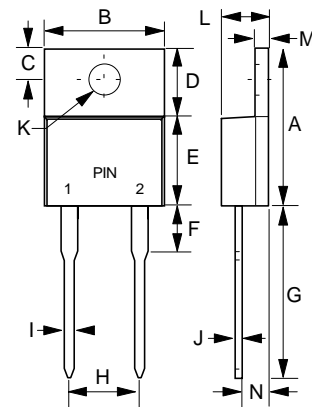
- Operating Junction Temperature: -50°C to +125°C
- Storage Temperature: -50°C to +125°C
- Typical Thermal Resistance 60°C/W Junction to Ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SBL1020	SBL1020	20V	14V	20V
SBL1030	SBL1030	30V	21V	30V
SBL1040	SBL1040	40V	26V	40V
SBL1050	SBL1050	50V	35V	50V
SBL1060	SBL1060	60V	42V	60V
SBL1080	SBL1080	80V	56V	80V
SBL10100	SBL10100	100V	80V	100V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10 A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1020-1040 1050-1060 1080-10100	$V_F$	.55V .75V .85V	$T_J = 25^\circ\text{C}$ $I_{FM} = 10A;$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 50mA	$T_C = 25^\circ\text{C}$ $T_C = 100^\circ\text{C}$

### TO-220AC



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	-----	.250	-----	6.35	
G	.500	.580	12.70	14.73	
H	.190	.210	4.83	5.33	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

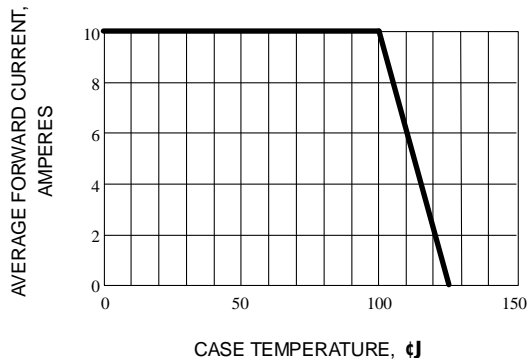


Fig. 1-FORWARD CURRENT DERATING CURVE

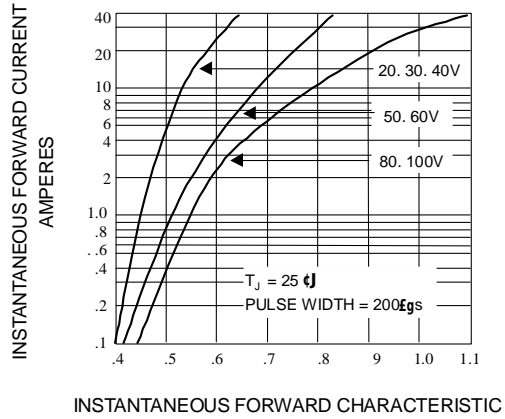


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

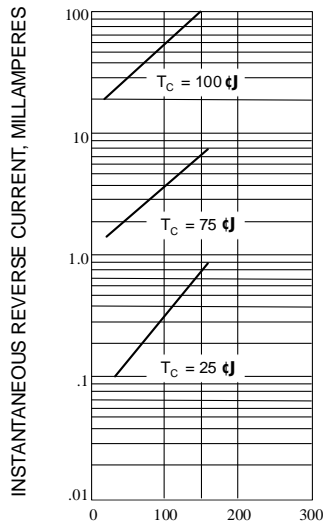


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

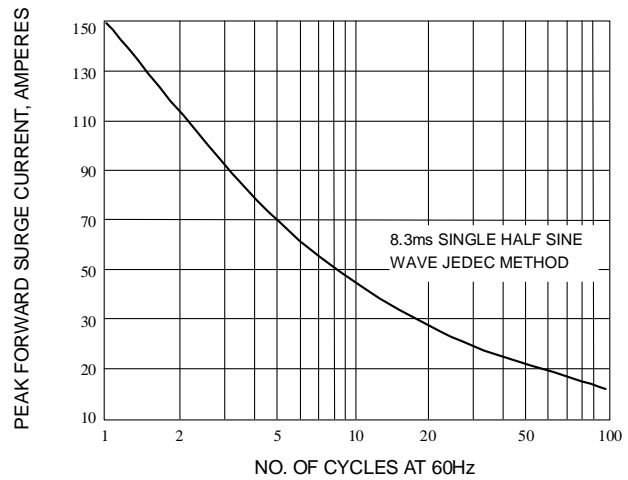


Fig. 4-MAXIMUM NON-REPETITIVE SURGE CURRENT

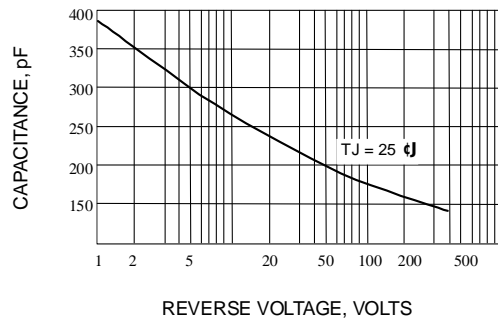


Fig. 5-TYPICAL JUNCTION CAPACITANCE