



Micro Commercial Components

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# SBL820 THRU SBL860

## 8 Amp Schottky Barrier Rectifier 20 to 60 Volts

### Features

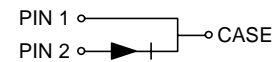
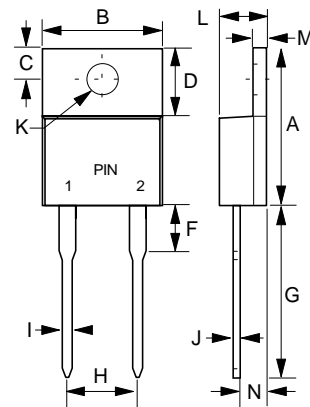
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- High Surge Capacity and High Efficiency
- Low Power Loss and Low Forward Voltage
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

### Maximum Ratings

- Operating Temperature: -50 °C to +125°C
- Storage Temperature: -50°C to +125°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SBL820	SBL820	20V	14V	20V
SBL830	SBL830	30V	21V	30V
SBL840	SBL840	40V	28V	40V
SBL850	SBL850	50V	35V	50V
SBL860	SBL860	60V	42V	60V

### TO-220AC



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

Average Forward Current	$I_{F(AV)}$	8A	$T_C = 100\text{ }^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150 A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element SBL820~840 SBL850~860	$V_F$	.55V .75V	$I_{FM} = 8A$ $T_A = 25^\circ\text{C}$ (Note 2)
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5 mA 50mA	$T_C = 25^\circ\text{C}$ $T_C = 125^\circ\text{C}$

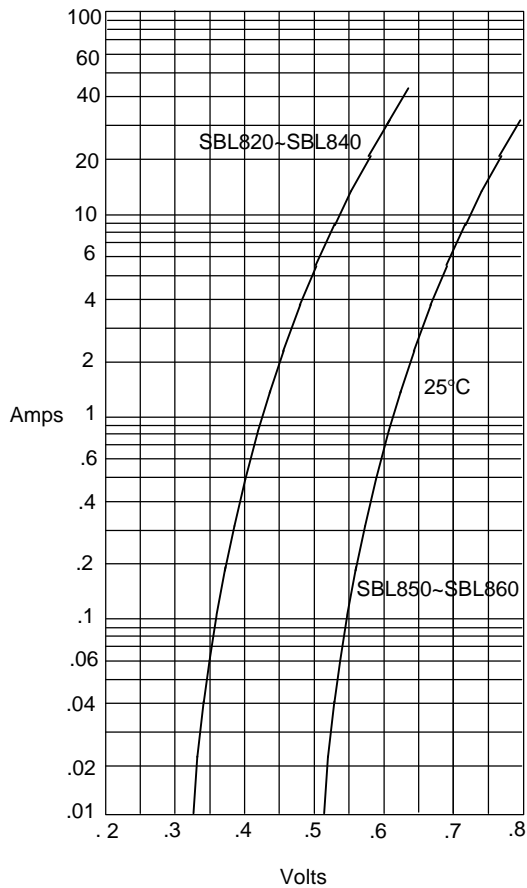
Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.  
 2.Pulse test: Pulse width 200 μsec

#### DIMENSIONS

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	
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	

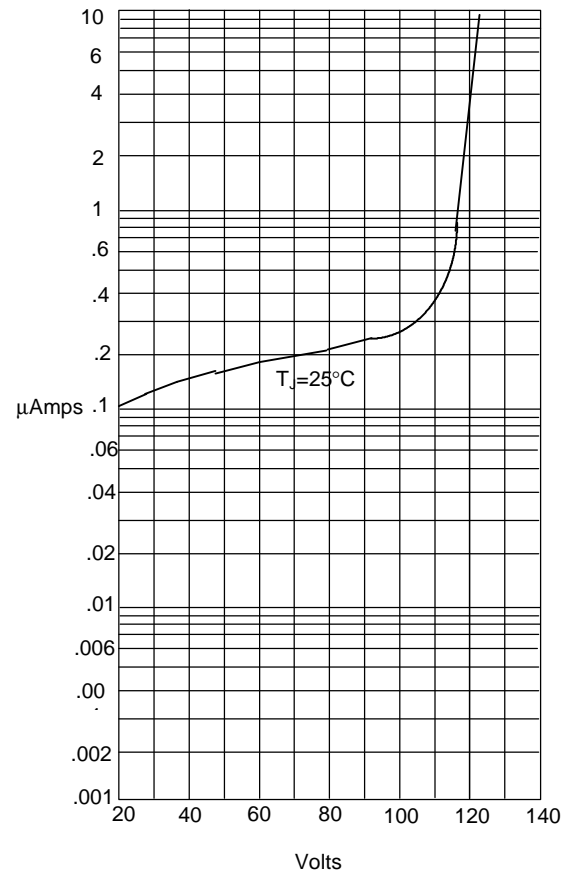
SBL820 thru SBL860

Figure 1  
Typical Forward Characteristics



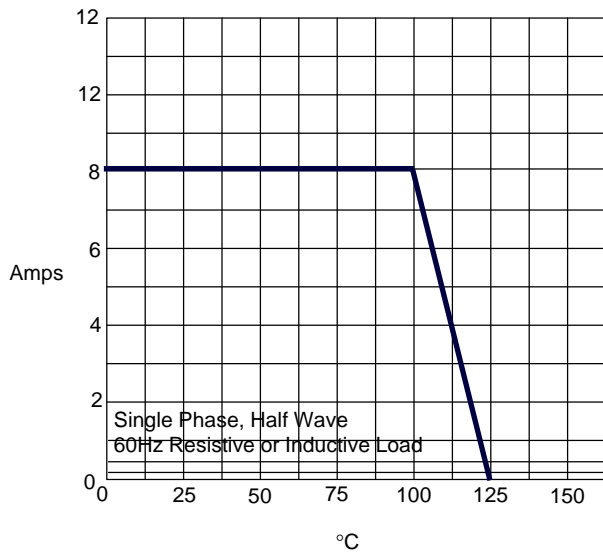
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
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Typical Reverse Characteristics



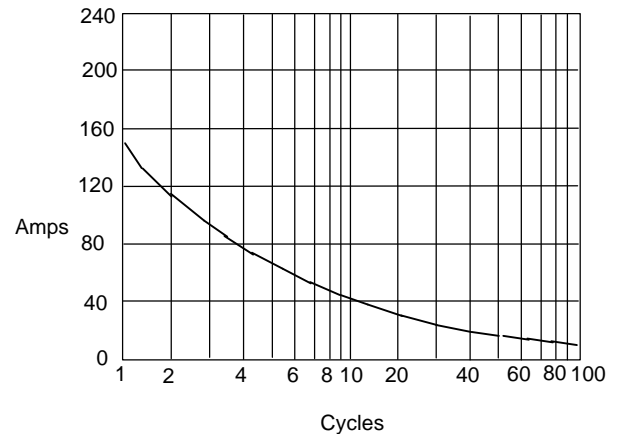
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles



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### Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

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