·M·C·C·
Micro Commercial Components

2 A Low VF Surface Mount Schottky Bridge Rectifier 100V

Features

• Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)

• Halogen Free. "Green" Device (Note 2)

• Epoxy Meets UL 94 V-0 Flammability Rating

• Moisture Sensitivity Level 1

• High Surge Current Capability

• Low Forward Voltage Drop

Maximum Ratings

• Operating Junction Temperature Range: -55^oC to $+150^oC$

• Storage Temperature Range: $-55°C$ to $+150°C$

• Typical Thermal Resistance: 25°C/W Junction to Lead

• Typical Thermal Resistance: 62.5°C/W Junction to Ambient

| MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
LMB210SL	210SL	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	2.0A	See Fig1
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, Half Sine
Instantaneous Forward Voltage	V_F	0.65V(Max.) 0.57V(Typ.) 0.70V(Typ.)	I_{FM} = 1A; T_J= 25°C I_{FM} = 2A; T_J= 25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1mA 10mA	T_J = 25°C T_J = 125°C

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

LMBS-1

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.197	0.205	4.90	5.20	
B	0.024		0.60		
C	---	0.059	---	1.50	
D	0.024	0.032	0.60	0.80	
E	---	0.189	---	4.80	
F	0.150	0.165	3.80	4.20	
G	---	0.209	---	5.30	
H	0.236	0.252	6.00	6.60	
J	0.177	0.185	4.30	4.70	
K	0.0009	0.004	0.02	0.21	
L	0.006	0.012	0.15	0.30	
M	0.017	0.031	0.25	0.80	

Suggested Solder Pad Layout
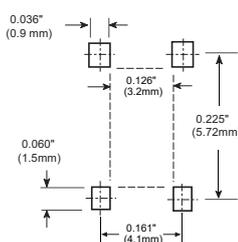
Curve Characteristics

Fig. 1 - Forward Current Derating Curve

Single Phase
Half Wave 60Hz
Resistive Load

Average Forward Current (A) vs Ambient Temperature (°C)
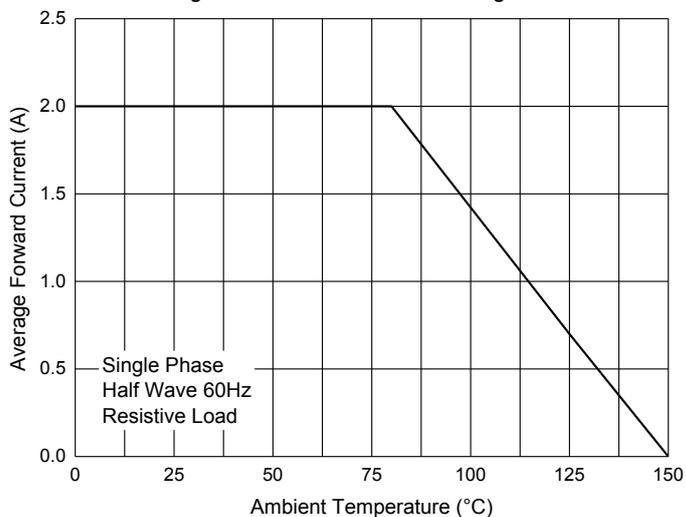
Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

8.3 ms Single Half Sine-Wave

Peak Forward Surge Current (A) vs Number of Cycles at 60 Hz
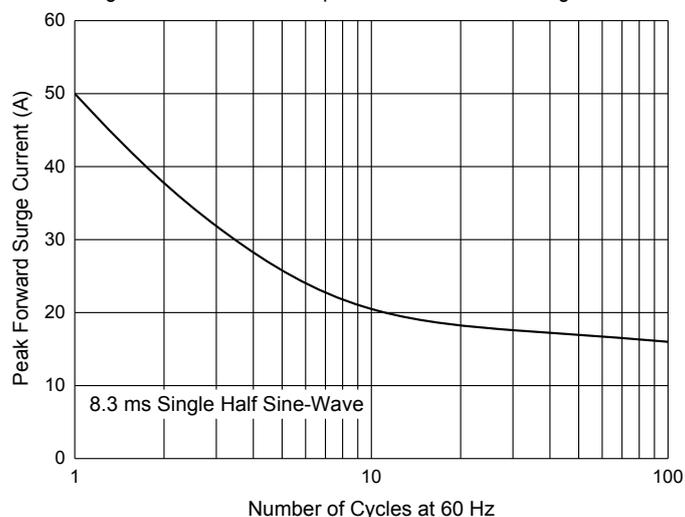
Fig. 3 - Typical Instantaneous Forward Characteristics

$T_J=125°C$
$T_J=75°C$
$T_J=25°C$

Instantaneous Forward Current (A) vs Instantaneous Forward Voltage (V)
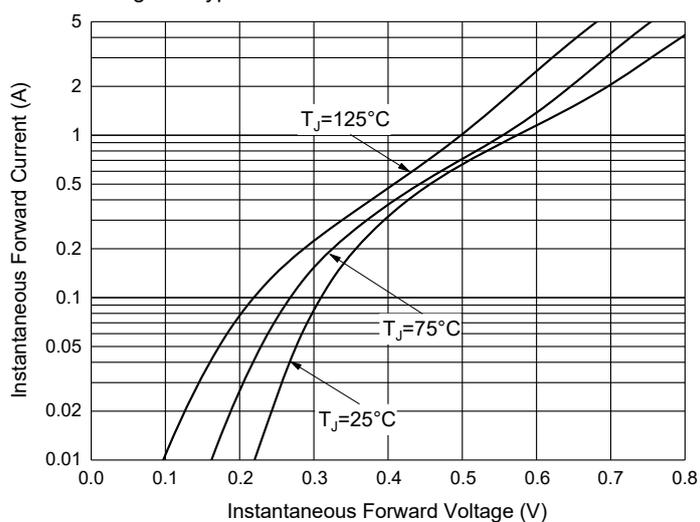
Fig. 4 - Typical Reverse Leakage Characteristics

$T_J=125°C$
$T_J=75°C$
$T_J=25°C$

Instantaneous Reverse Leakage Current (μA) vs Percent of Rated Peak Reverse Voltage (%)