



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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MBR12100LPS

12 Amp Schottky Barrier Rectifier

100 Volts

TO-277R

10-211B				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				
$ \begin{array}{c c} \downarrow \\ \uparrow \\ \hline $				
D2 D D D				
PIN 3 0-14 O PIN 2 HEAT SINK OPIN 1				

	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.039	.047	1.00	1.20	
A2	.006	.017	0.15	0.43	
b1	.030	.041	0.75	1.05	
b2	.065	.077	1.65	1.95	
D	.148	.169	3.75	4.30	
D2	.110	.126	2.80	3.20	
Е	.250	.264	6.35	6.70	
е	.065	.077	1.65	1.95	
E1	.207	.228	5.25	5.80	
E2	.120	.142	3.05	3.60	
Ĺ	.028	.051	0.70	1.30	
W	.031	.056	0.80	1.42	

Features

Halogen free available upon request by adding suffix "-HF"

- Low forward voltage drop
- Super long operating life
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR12100LPS	12100L	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Electrical characte	Liceti icai characteristics @ 25 c chics other wise specifica					opeeineu
Average Forward Current	I _{F(AV)}		12A		T _L = 100°	С
Peak Forward Surge Current	I _{FSM}		250A		8.3ms, ha	alf sine
		Min.	Тур.	Max.		
Forward Voltage	V _F		0.63V		IF=12A IF=12A	T _J = 25°C T _J =125°C
Reverse Current	I _R		2	0.25mA 35mA	TJ=25°C TJ=125°C	
Maximum thermal Resistance(note 2)	RthJA		27°	C/W	Note 2	

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7. Note: 2. Device mounted on Polymide PCB with 16x recommended pad layout.

MBR12100LPS



RATINGS AND CHARACTERISTICS CURVES

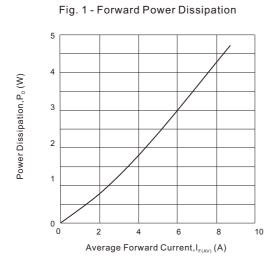


Fig. 2 - Instantaneous Forward Characteristics

100 $T_{\lambda}=150^{\circ}C$ $T_{\lambda}=100^{\circ}C$ $T_{\lambda}=100^{\circ}C$ $T_{\lambda}=25^{\circ}C$ Instantaneous Forward Voltage, V_F (Volts)

Fig. 3 - Reverse Characteristics

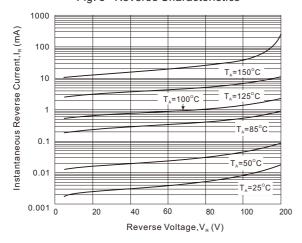


Fig.4 - Forward Current Derating Curve

12
10
8
8
0
0
25
50
75
100
125
150
175
Case Temperature, T_L (°C)



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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