



Micro Commercial Components

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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

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

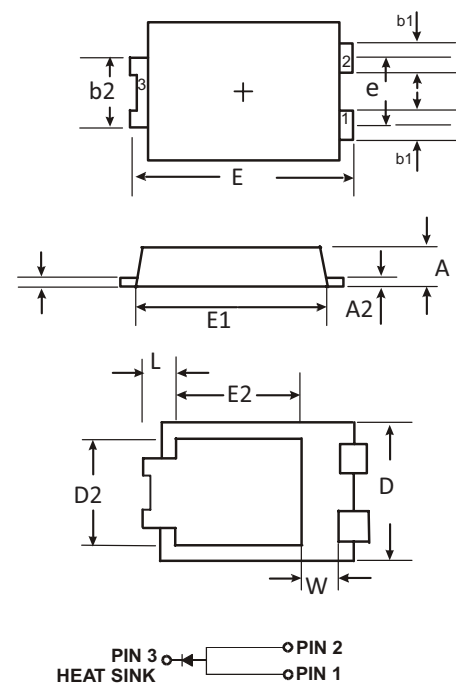
Average Forward Current	$I_{F(AV)}$	12A			$T_L = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	250A			8.3ms, half sine
Forward Voltage	V_F	Min.	Typ.	Max.	$I_F=12A \ T_J = 25^\circ\text{C}$ $I_F=12A \ T_J = 125^\circ\text{C}$
		---	0.70V 0.63V	0.80V 0.68V	
Reverse Current	I_R	---	20uA 2	0.25mA 35mA	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$
Maximum thermal Resistance(note 2)	R_{thJA}	27°C/W			

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

MBR12100LPS

12 Amp Low VF Schottky Barrier Rectifier 100 Volts

TO-277B



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.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	
E	.250	.264	6.35	6.70	
e	.065	.077	1.65	1.95	
E1	.207	.228	5.25	5.80	
E2	.120	.142	3.05	3.60	
L	.028	.051	0.70	1.30	
W	.031	.056	0.80	1.42	

MBR12100LPS

RATINGS AND CHARACTERISTICS CURVES

Fig. 1 - Forward Power Dissipation

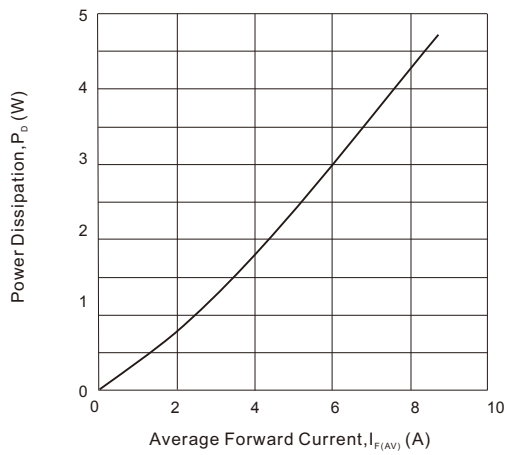


Fig. 2 - Instantaneous Forward Characteristics

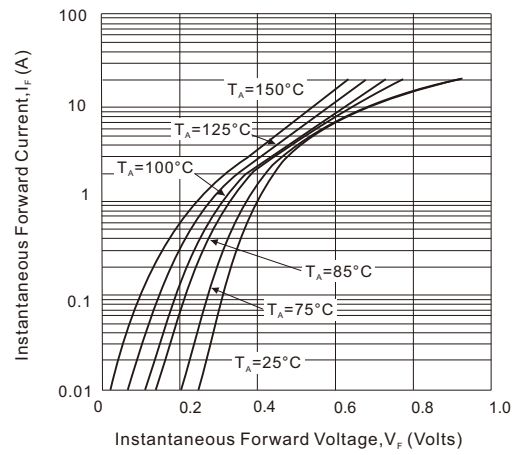


Fig. 3 - Reverse Characteristics

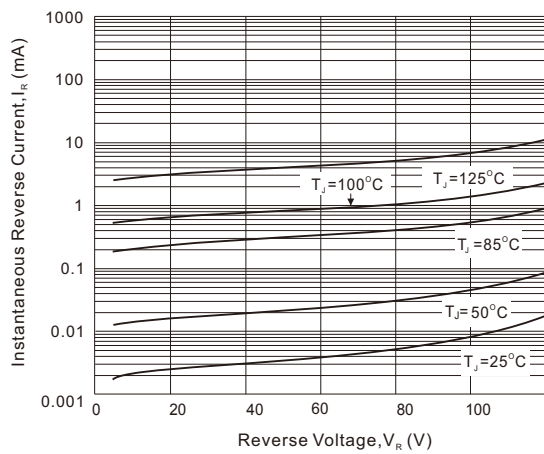
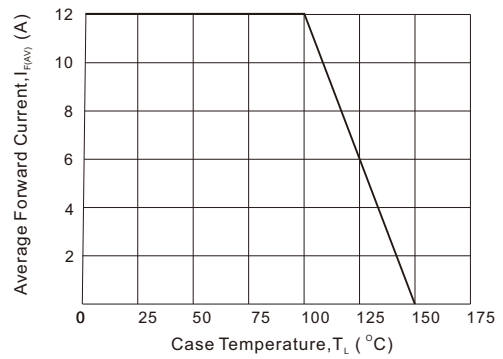


Fig. 4 - Forward Current Derating Curve





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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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