



Micro Commercial Components



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

MBR12U100L

12 Amp Schottky Barrier Rectifier 100 Volts

Features

- Halogen free available upon request by adding suffix "-HF"
- High surge Forward current capability
- Low Power loss, High efficiency
- 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

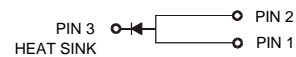
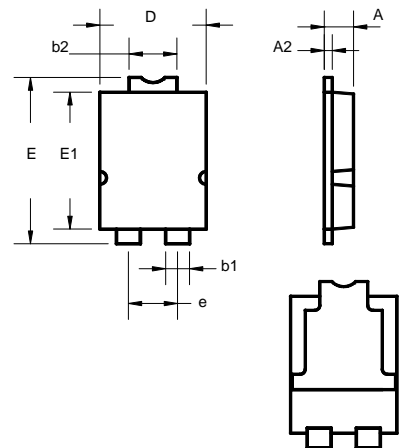
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR12U100L	12U100L	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I_o	12A			See Fig 1
Peak Forward Surge Current	I_{FSM}	180A			8.3ms, half sine
Forward Voltage	V_F	Min.	Typ.	Max.	$I_F=12A \quad T_J=25^\circ C$
		---	0.53V	0.60V	
Reverse Current	I_R	---	---	0.5mA 10mA	$V_R=100 \quad T_J=25^\circ C$ $V_R=100 \quad T_J=125^\circ C$
Reverse Breakdown Voltage	V_{BR}	100V	---	---	$I_R=0.5mA$
Current Squared Time	I^2t	135 A ² s			$1ms \leq t < 8.3ms$ $T_J=25^\circ C$
Maximum thermal Resistance	$R_{\theta JC}$	8.0 °C/W			

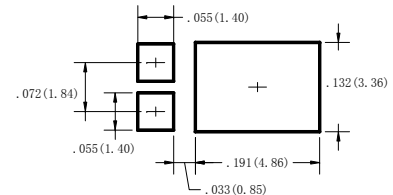
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

TO-277



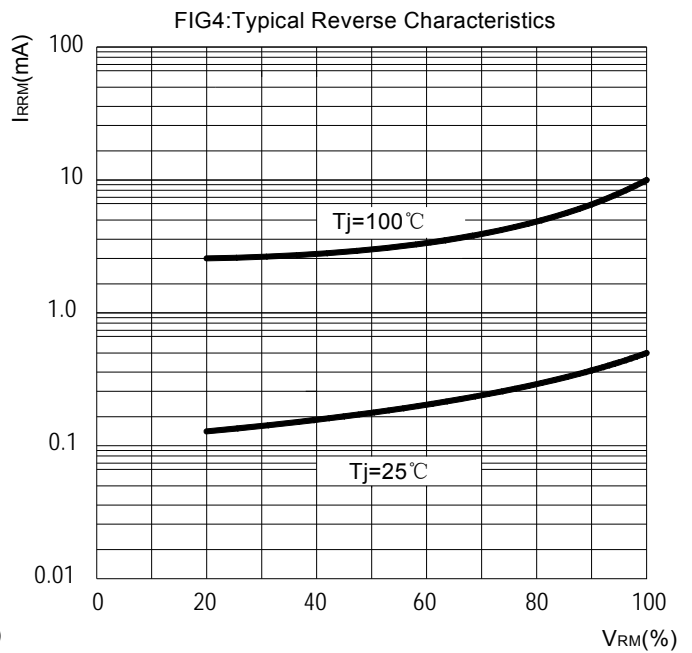
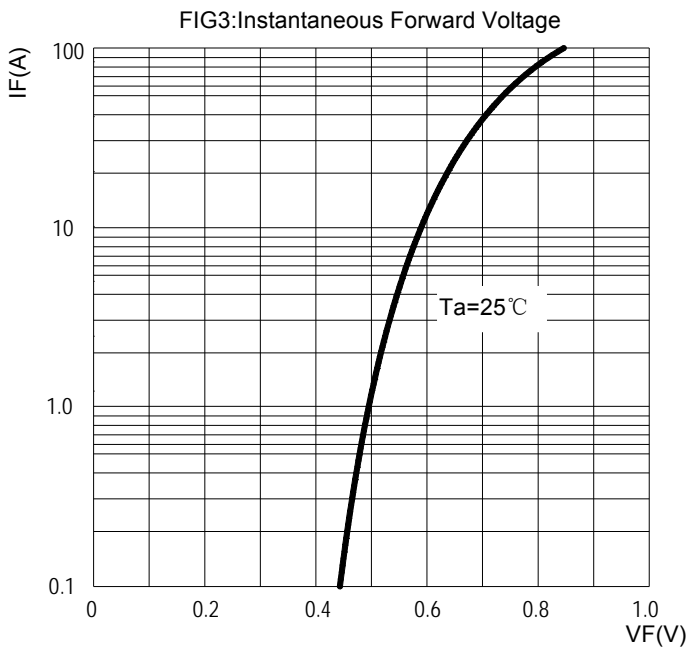
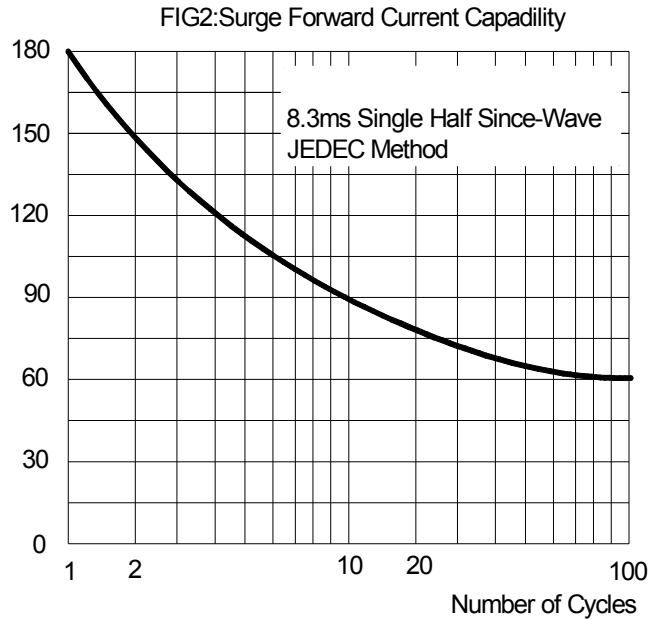
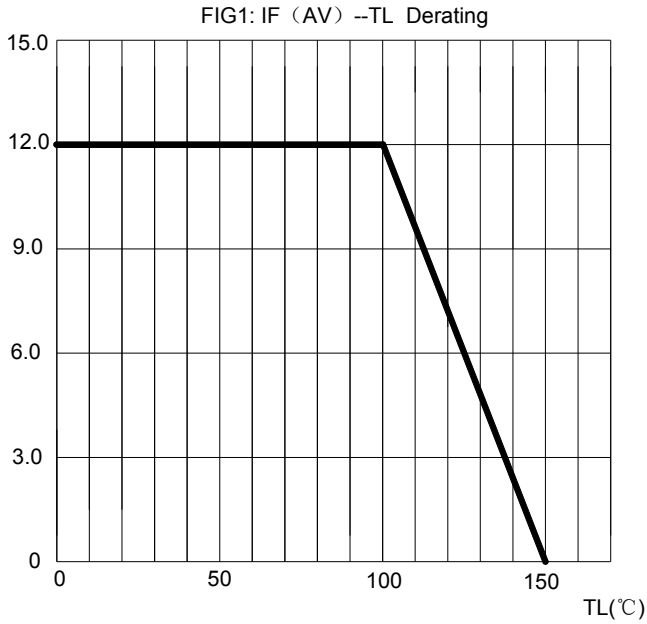
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.041	.045	1.05	1.15	
A2	.010	.014	0.25	0.35	
b1	.031	.039	0.80	1.00	
b2	.067	.075	1.70	1.90	
D	.154	.161	3.90	4.10	
E	.252	.260	6.40	6.60	
E1	.205	.215	5.20	5.40	
e	.071	.075	1.80	1.90	

Mounting Pad Layout



MBR12U100L

Characteristics(Typical)





Micro Commercial Components

Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 4Kpcs/Reel

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

APPLICATIONS DISCLAIMER

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.

www.mccsemi.com