

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

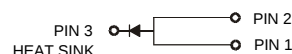
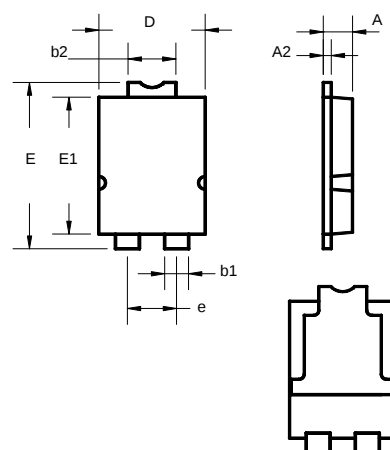
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR12U100L	12U100L	100V	70V	100V

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			

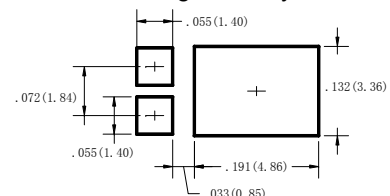
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

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



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Characteristics(Typical)

FIG1: IF (AV) --TL Derating

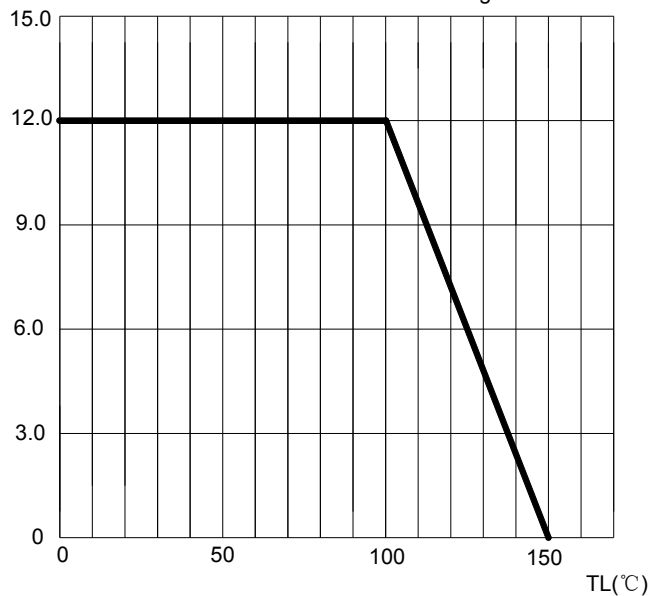


FIG2: Surge Forward Current Capability

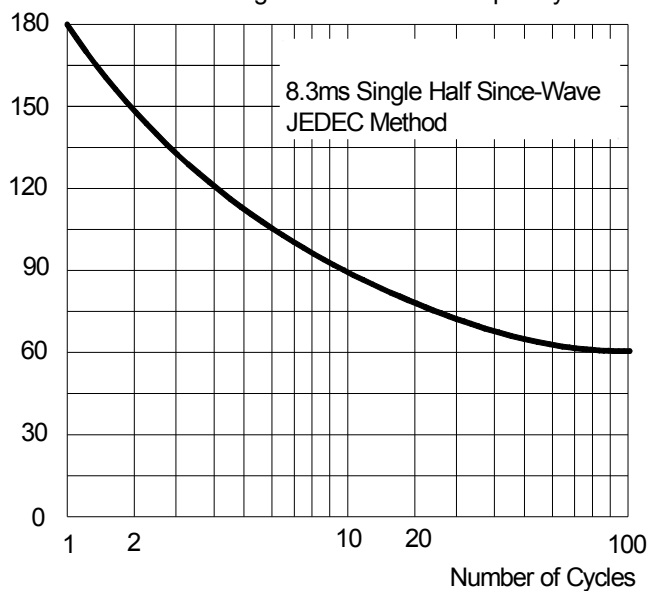


FIG3: Instantaneous Forward Voltage

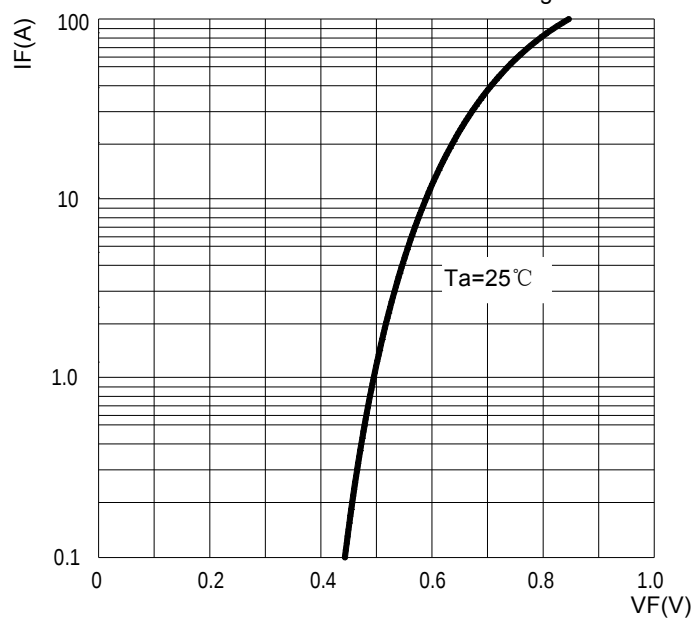
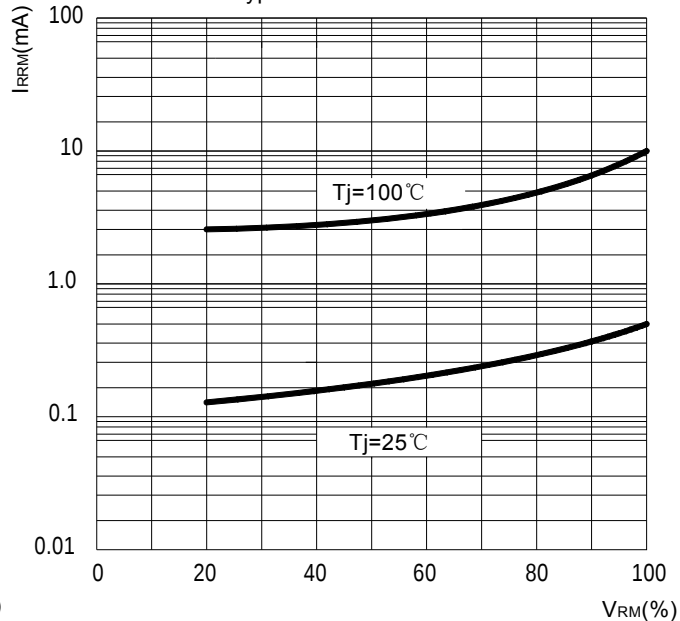


FIG4: Typical Reverse Characteristics



Ordering Information

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

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

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