

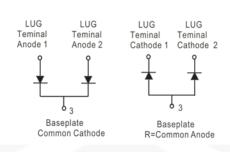
## MBR12045CT thru MBR120100CTR

## Silicon Power Schottky Diode

 $V_{RRM} = 45 \text{ V} - 100 \text{ V}$  $I_{F(AV)} = 120 \text{ A}$ 

#### **Features**

- High Surge Capability
- $\bullet$  Types from 45 V to 100 V  $V_{RRM}$
- Not ESD Sensitive





**Twin Tower Package** 



#### Maximum ratings, at T<sub>i</sub> = 25 °C, unless otherwise specified ("R" devices have leads reversed)

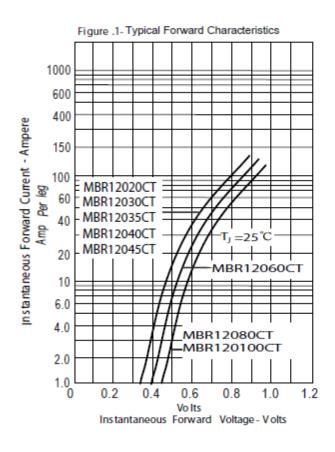
Parameter	Symbol	Conditions	MBR12045CT(R) N	MBR12060CT(R)	MBR12080CT(R)	MBR120100CT(R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		45	60	80	100	V
RMS reverse voltage	V <sub>RMS</sub>		32	42	57	70	V
DC blocking voltage	$V_{DC}$		45	60	80	100	V
Operating temperature	T <sub>j</sub>		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T <sub>stg</sub>		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

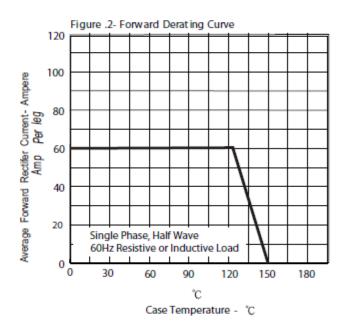
#### Electrical characteristics, at Tj = 25 °C, unless otherwise specified

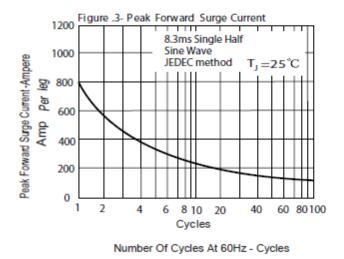
Parameter	Symbol	Conditions	MBR12045CT(R)	MBR12060CT(R)	MBR12080CT(R)	MBR120100CT(R)	Unit
Average forward current (per pkg)	I <sub>F(AV)</sub>	T <sub>C</sub> = 125 °C	120	120	120	120	Α
Peak forward surge current (per leg)	I <sub>FSM</sub>	$t_p = 8.3 \text{ ms}$ , half sine	800	800	800	800	Α
Maximum forward voltage (per leg)	$V_{F}$	I <sub>FM</sub> = 60 A, T <sub>j</sub> = 25 °C	0.7	0.75	0.84	0.84	V
Reverse current at rated		T <sub>j</sub> = 25 °C	1	1	1	1	
DC blocking voltage	$I_R$	$T_j = 100  ^{\circ}C$	10	10	10	10	mΑ
(per leg)		T <sub>j</sub> = 150 °C	30	30	30	30	
Thermal characterist	ics						
Thermal resistance, junction-case, per leg	$R_{\Theta JC}$		0.80	0.80	0.80	0.80	°C/W

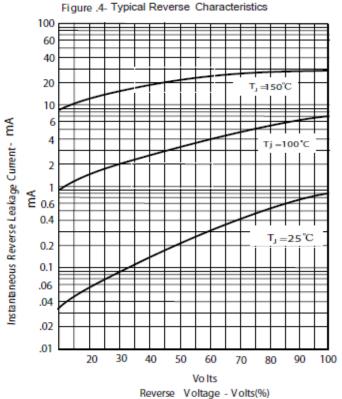


### MBR12045CT thru MBR120100CTR





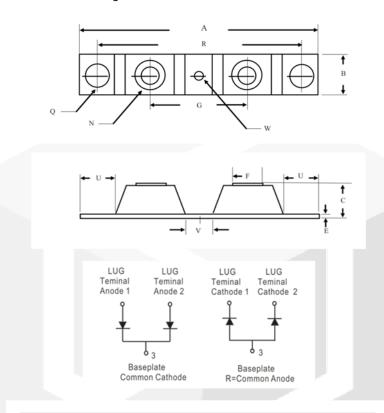




## MBR12045CT thru MBR120100CTR

### Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIM	Inch	es	Millimeters			
	Min	Max	Min	Max		
A		3.630		92.40		
В	0.700	0.800	17.78	20.32		
С		0.650		16.51		
Е	0.130	0.141	3.30	3.60		
F	0.482	0.490	12.25	12.45		
G	1.368	BSC	34.75	BSC		
N		1/4-20 UNC	FULL			
Q	0.275 0.290		6.99	7.37		
R	3.150	BSC	80.01	BSC		
U	0.600		15.24			
V	0.312	0.370	7.92	9.40		
W	0.180 0.195		4.57 4.95			

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<u>25.330.4753.1</u> <u>25.</u>	330.5253.1	25.334.3253.1	25.334.3353.1	25.350.2053.0	25.352.4753.1	25.522.3253.0	<u>T483C</u> <u>T484C</u>	T485F T485H
T512F-YEB T513	<u>F T514F T</u>	<u>T612FSE</u>	25.161.3453.0	25.179.2253.0	25.194.3253.0	25.325.1253.1	25.326.4253.1	25.330.0953.1
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25.640.5053.0								