

Schottky Barrier Rectifier

MBRB20100CT

FEATURES

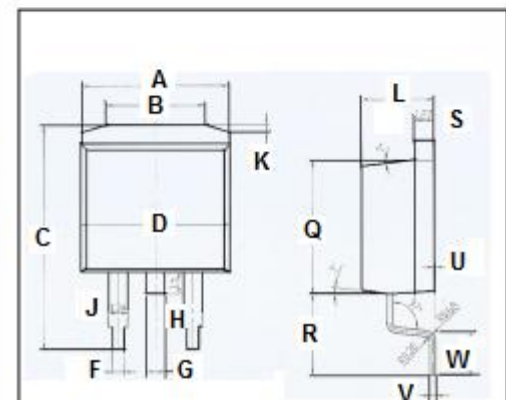
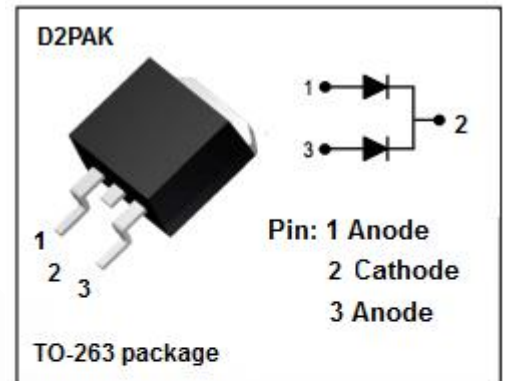
- Schottky barrier chip
- Low Power Loss, High Efficiency
- Guard ring for transient protection
- High Operating Junction Temperature
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For use in high frequency rectifier of switching mode power supplies, freewheeling diodes, DC-to-DC converters or polarity protection application.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
VRRM VRMS VR	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	100	V
IF(AV)	Average Rectified Forward Current	20	A
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	150	A
TJ	Junction Temperature	-65~150	°C
Tstg	Storage Temperature Range	-65~175	°C



DIM	mm	
	MIN	MAX
A	10	
B	6.6	6.8
C	15.23	15.25
D	10.15	10.17
F	0.76	0.78
G	1.26	1.28
H	1.4	1.6
J	1.33	1.35
K	0.4	0.6
L	4.6	4.8
Q	8.69	8.71
R	5.28	5.30
S	1.26	1.28
U	0.0	0.2
V	0.37	0.39
W	2.80	2.82

Schottky Barrier Rectifier**MBRB20100CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.0	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	TYP	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=10A ; T_j=25^{\circ}C$		0.85	V
		$I_F=10A ; T_j=125^{\circ}C$		0.75	
		$I_F=20A ; T_j=25^{\circ}C$		0.95	
		$I_F=20A ; T_j=125^{\circ}C$		0.85	
I_R	Maximum Instantaneous Reverse Current	$V_R= V_{RWM}; T_j= 25^{\circ}C$		0.1	mA
		$V_R= V_{RWM}; T_j= 125^{\circ}C$		6	mA