

Schottky Barrier Rectifier

MBRB1045

FEATURES

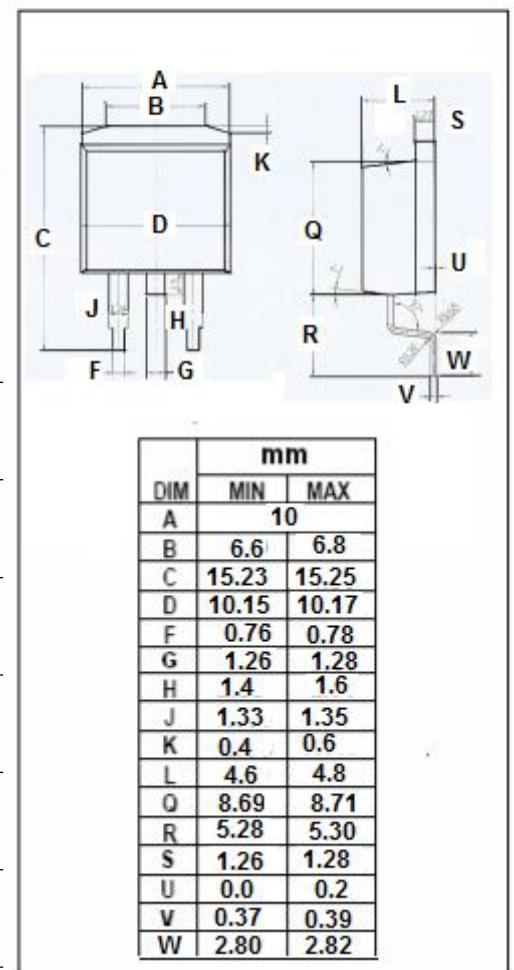
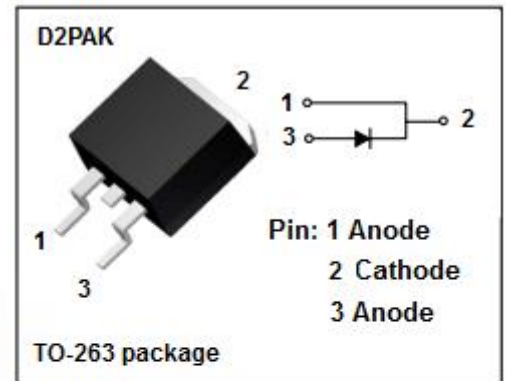
- Schottky barrier chip
- Low Power Loss, High Efficiency
- Guard ring for transient protection
- High Operating Junction Temperature
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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	45	V
IF(AV)	Average Rectified Forward Current	10	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



Schottky Barrier Rectifier**MBRB1045****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 Voltage	Instantaneous	Forward	$I_F=10A ; T_j=125^{\circ}C$		0.57	V
				$I_F=20A ; T_j= 25^{\circ}C$		0.84	
				$I_F=20A ; T_j= 125^{\circ}C$		0.72	
I_R	Maximum Current	Instantaneous	Reverse	$V_R= V_{RWM}; T_j= 25^{\circ}C$		100	μA
				$V_R= V_{RWM}; T_j= 125^{\circ}C$		15	mA