

Schottky Barrier Rectifier

MBRB1045

FEATURES

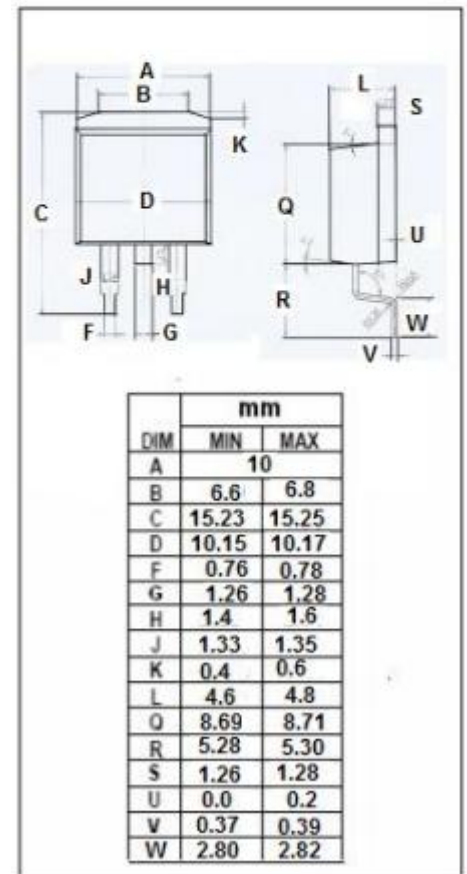
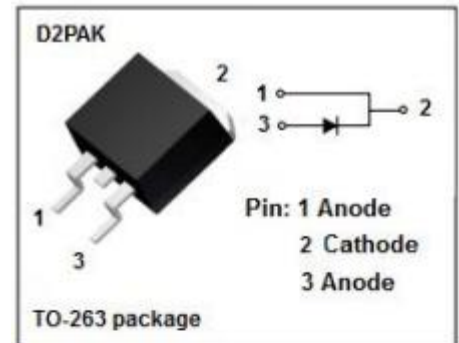
- Schottky barrier chip
- Low Power Loss/High Efficiency
- High Operating Junction Temperature
- Low Forward Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	45	V
$I_{F(AV)}$	Average Rectified Forward Current	10	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave „single phase,60Hz)	150	A
T_J	Junction Temperature	-65~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^{\circ}\text{C}$



Schottky Barrier Rectifier**MBRB1045****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.0	°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

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