

## Schottky Barrier Rectifier

**MBRS1035**

### FEATURES

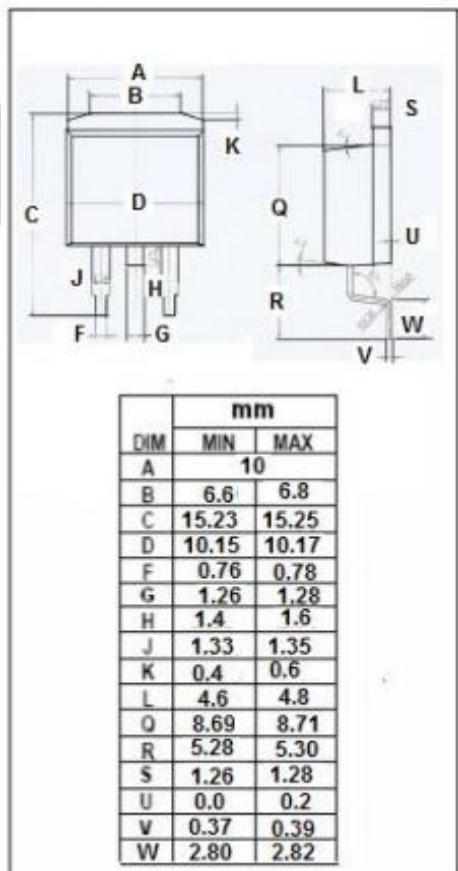
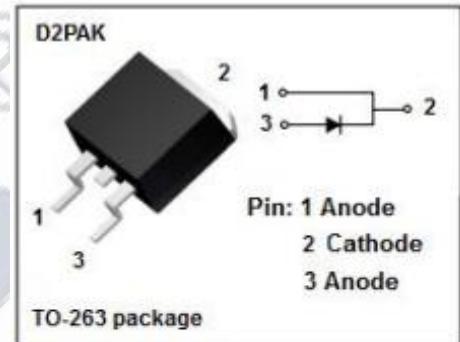
- Schottky barrier chip
- Low Power Loss/High Efficiency
- High Operating Junction Temperature
- Low Forward Voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### 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
$V_{RRM}$	Peak Repetitive Reverse Voltage		
$V_{RWM}$	Working Peak Reverse Voltage	35	V
$V_R$	DC Blocking Voltage		
$I_{F(AV)}$	Average Rectified Forward Current	10	A
$I_{FSM}$	Non-repetitive Peak Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load	120	A
$T_J$	Junction Temperature	-65~175	°C
$T_{stg}$	Storage Temperature Range	-65~175	°C



**Schottky Barrier Rectifier****MBRS1035****THERMAL CHARACTERISTICS**

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

**ELECTRICAL CHARACTERISTICS**

SYMBOL	PARAMETER	CONDITIONS	TYP	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F = 10A ; T_j = 125^\circ C$		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 Instantaneous Reverse Current	$V_R = V_{RWM}, T_j = 25^\circ C$		100	$\mu A$
		$V_R = V_{RWM}, T_j = 125^\circ C$		15	mA