

Schottky Barrier Rectifier

MBRD10100CT

FEATURES

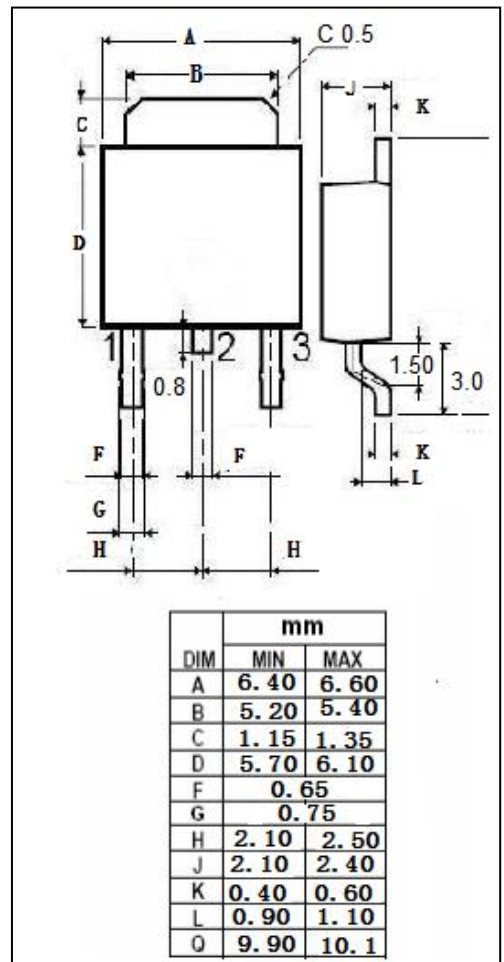
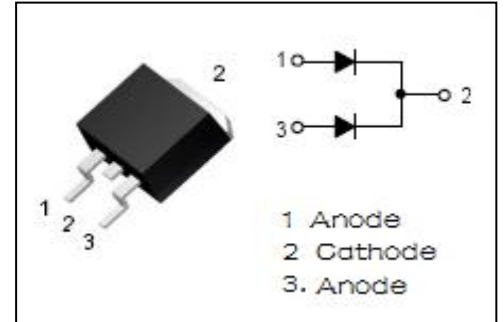
- With TO-251(DPKE) package
- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss,High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High frequency switching
- High efficiency SMPS
- Automotive

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM} V _{RWM} V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R) T _C = 100°C	10	A
I _{FSM}	Non-repetitive Peak Surge Current 8.3ms half sine wave	120	A
T _J	Junction Temperature	125	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-a}$	Thermal Resistance, Junction to ambient	80	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300us, Duty Cycle $\leq$ 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 5A ; T_C = 25^{\circ}C$ $I_F = 10A ; T_C = 25^{\circ}C$	0.85 0.95	V
I_R	Maximum Instantaneous Reverse Current	$V_R = 100V, T_C = 25^{\circ}C$	100	μA

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