

Schottky Barrier Rectifier

MBRD10100CT

FEATURES

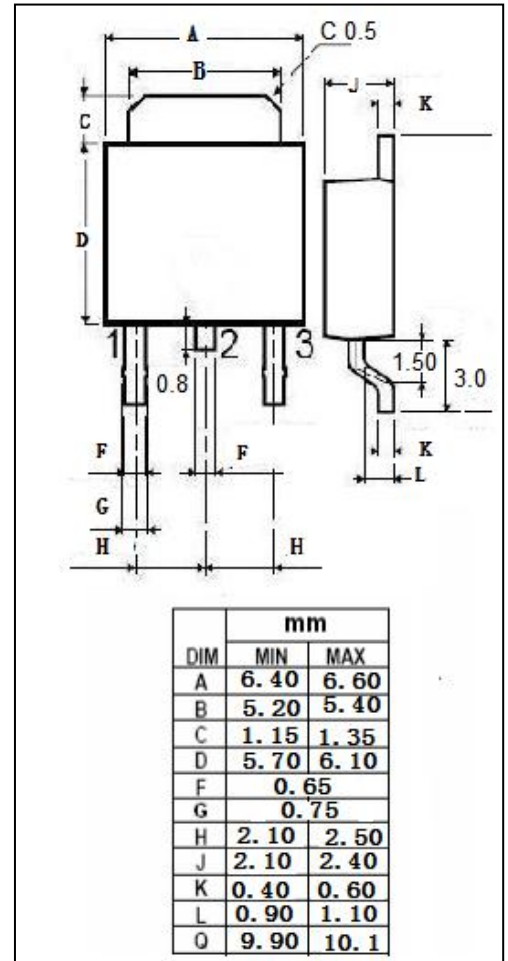
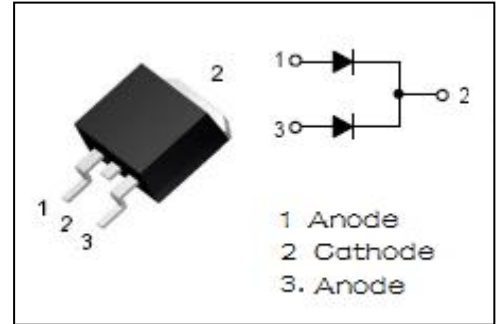
- With TO-251(DPKE) package
- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss,High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High frequency switching
- High efficiency SMPS
- Automotive

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
VRRM VRWM VR	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
IF(AV)	Average Rectified Forward Current (Rated VR) TC= 100°C	10	A
IFSM	Non-repetitive Peak Surge Current 8.3ms half sine wave	120	A
TJ	Junction Temperature	125	°C
Tstg	Storage Temperature Range	-55~150	°C



Schottky Barrier Rectifier**MBRD10100CT****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