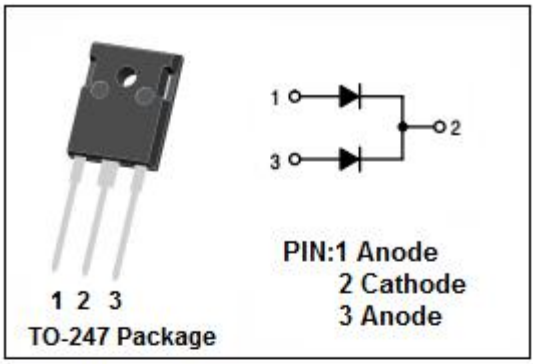
Schottky Barrier Rectifier — MBR3045PT



FEATURES

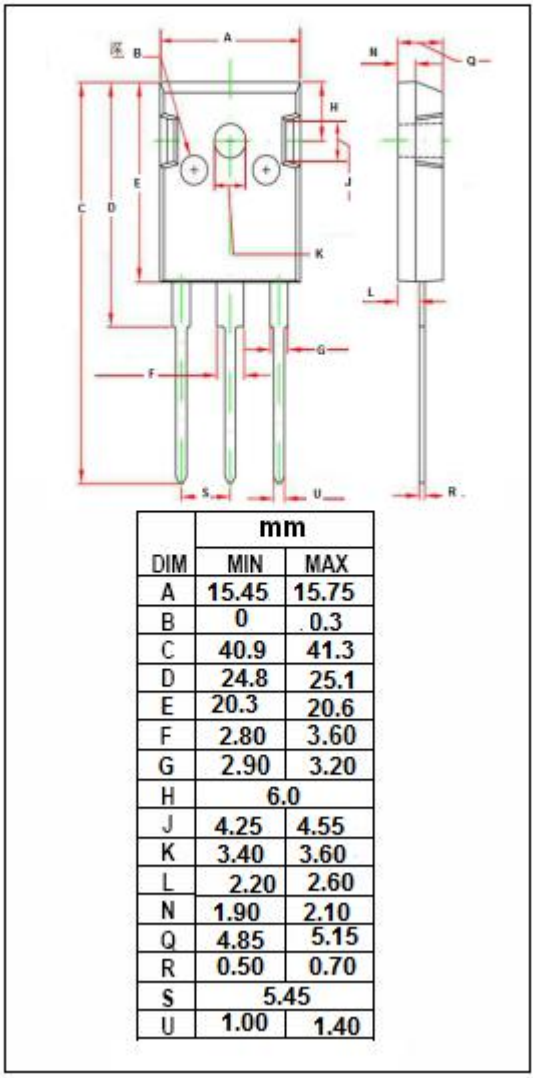
- High Current Capability, High Efficiency.
- High Junction Temperature Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Inverters Circuit.
- Low Voltage Continued Circuit and Protection Circuit

ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	VALUE	UNIT
V_{RWM}	Peak Inverse Voltage	45	V
$I_{F(AV)}$	Max. Average Forward	30	A
I_{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	200	A
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-40~150	℃



DIM	mm MIN	MAX
A	15.45	15.75
B	0	0.3
C	40.9	41.3
D	24.8	25.1
E	20.3	20.6
F	2.80	3.60
G	2.90	3.20
H	6.0	
J	4.25	4.55
K	3.40	3.60
L	2.20	2.60
N	1.90	2.10
Q	4.85	5.15
R	0.50	0.70
S	5.45	
U	1.00	1.40

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THERMAL CHARACTERISTICS

SYMBOL	Item	MAX	UNIT
$R_{\theta JC}$	Typical Thermal Resistance(per leg)	0.5	℃/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μs,Duty Cycle≤1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 15A ; Tj= 25℃	0.66	V
		I_F= 15A ; Tj= 125℃	0.55	
I_R	Maximum Instantaneous Reverse Current	V_R= $V_{RWM;}$Tj= 25℃	0.05	mA
		V_R= $V_{RWM;}$Tj= 125℃	25	