

Power Schottky Rectifier - 40Amp 250Volt

☐ Features

- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- High Junction Temperature Capability
- Low forward voltage, high current capability
- High surge capacity
- Low power loss, high efficiency
- Halogen-Free

☐ Application

- AC/DC Switching Adaptor and other Switching Power Supply

☐ Absolute maximum ratings

Symbol	Ratings	Unit	Conditions
$I_F(AV)$	40	A	Average Forward Current
V_{RRM}	250	V	Repetitive Peak Reverse Voltage
I_{FSM}	300	A	Peak Forward Surge Current
V_F	0.90	V	Forward Voltage Drop
T_j, T_{stg}	-50 to +150	°C	Operating and Storage Temperature

☐ Electrical characteristics

Parameters	Symbol	Ratings	Conditions
Maximum Instantaneous Forward Voltage	V_F	1.00V	Per Leg at $I_F = 40A$ $T_c = 25^\circ C$
		0.90V	$T_c = 125^\circ C$
Maximum Reverse Leakage Current	I_R	0.05mA	Per Leg at $V_R = 250V$ $T_c = 25^\circ C$
		10mA	$T_c = 125^\circ C$
Typical Thermal Resistance,Junction to Case	$R_{\theta(j-c)}$	2.2 °C/W	Per Leg TO-220AC
		4.5 °C/W	ITO-220AC

Note : 1.Mounted on P.C.B with copper pad size 20mm x 30mm, thickness 1.5mm

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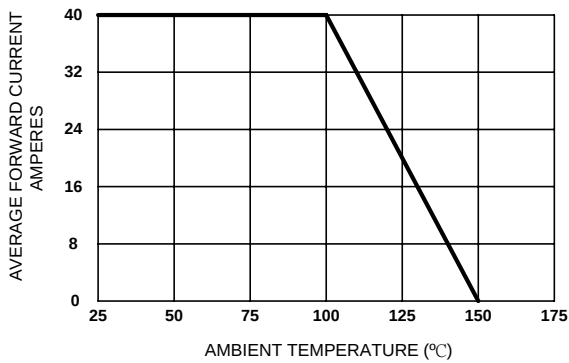


Figure 1. Forward Current Derating Curve

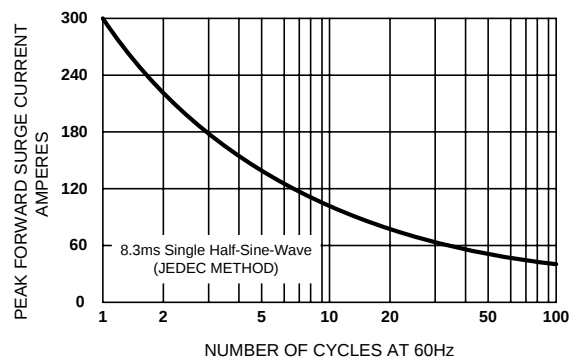


Figure 2. Maximum Non-repetitive Surge Current

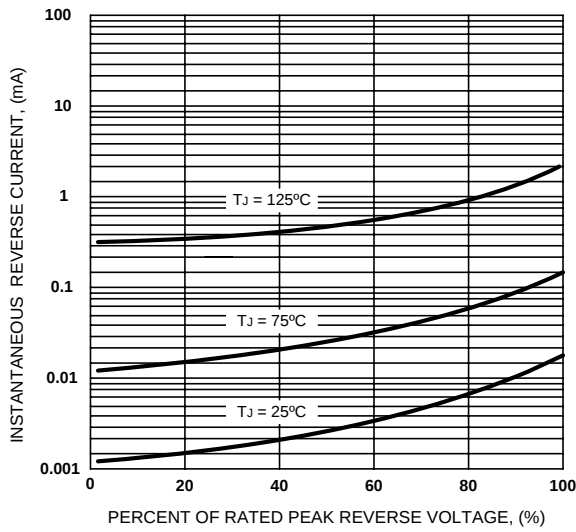


Figure 3. Typical Reverse Characteristics

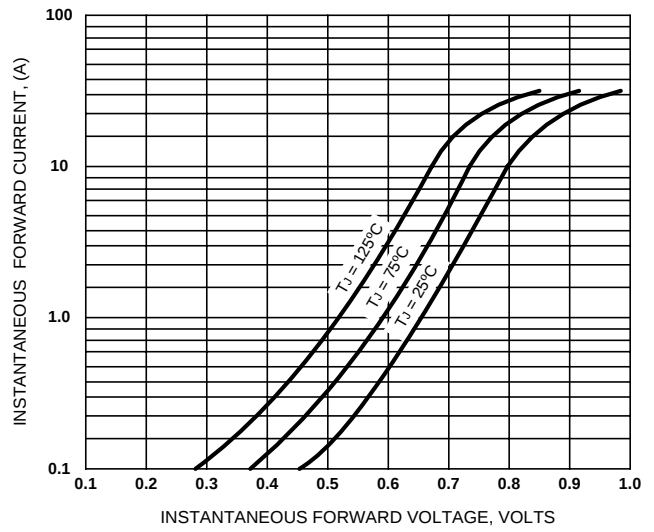


Figure 4. Typical Forward Characteristics

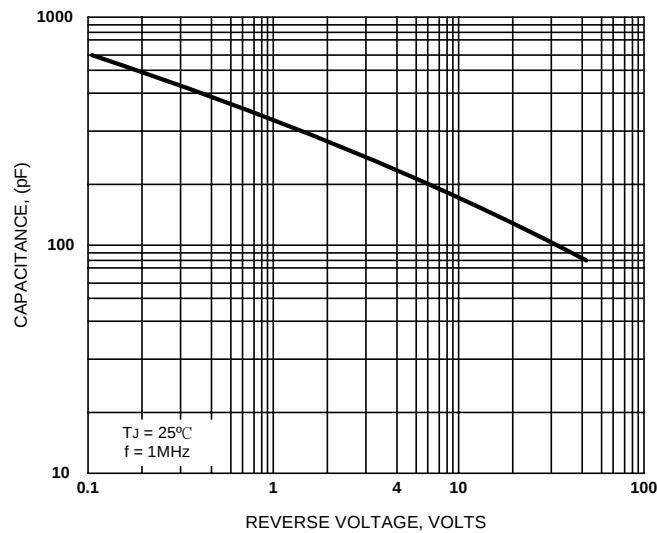
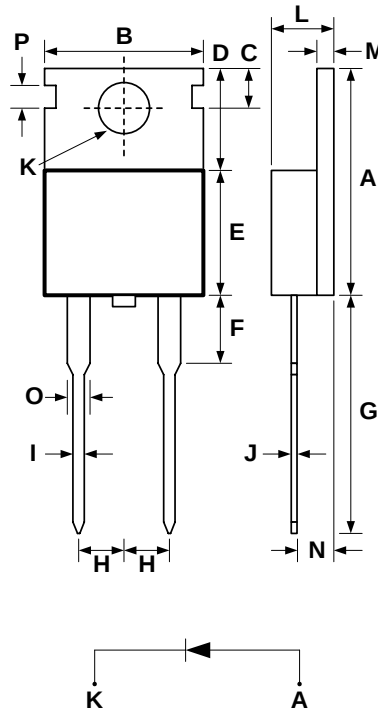


Figure 5. Typical Junction Capacitance

MBR40250CH

TO-220AC



DIMENSIONS					
DIM	INCHES		MILLIMETERS		NOTE
	MIN	MAX	MIN	MAX	
A	.610	.630	15.5	16.00	
B	.390	.413	9.90	10.50	
C	.106	.126	2.70	3.20	
D	.228	.272	5.80	6.90	
E	.348	.372	8.85	9.45	
F	.102	.142	2.60	3.60	
G	.512	.551	13.00	14.00	
H	.093	.112	2.35	2.85	
I	.028	.037	0.70	0.95	
J	.016	.026	0.40	0.65	
K	.132	.152	3.35	3.85	
L	.169	.185	4.30	4.70	
M	.045	.057	1.15	1.45	
N	.089	.112	2.25	2.85	
O	.043	.055	1.10	1.40	
P	.055	.067	1.40	1.70	