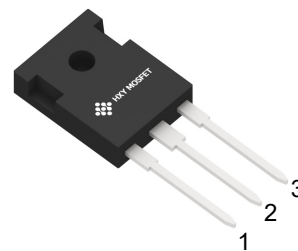


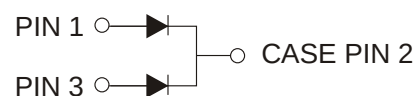


Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



TO-247



Maximum Ratings (Ta=25°C unless otherwise noted)

Type Number	MBR40100PT	Units
Maximum Recurrent Peak Reverse Voltage	100	V
Maximum RMS Voltage	70	V
Maximum DC Blocking Voltage	100	V
Maximum Average Forward Rectified Current at Tc=125°C	40	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	300	A
Maximum Instantaneous Forward Voltage at 40.0A	0.85	V
Maximum DC Reverse Current Ta=25°C	0.02	mA
at Rated DC Blocking Voltage Ta=100°C	2	mA
Typical Junction Capacitance (Note1)	580	pF
Typical Thermal Resistance RθJC (Note 2)	2.5	°C/W
Operating Temperature Range Tj	-65 — +150	°C
Storage Temperature Range Tstg	-65 — +150	°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.



Typical Characteristics

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

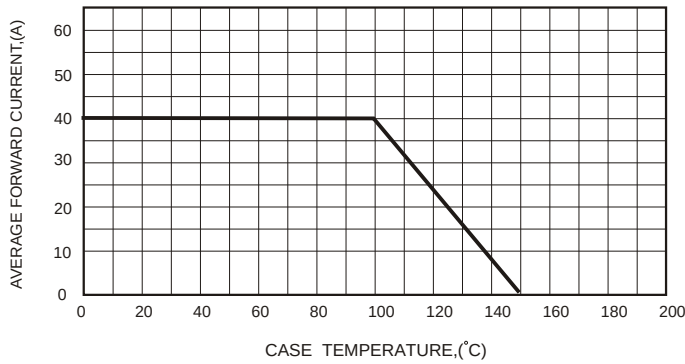


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

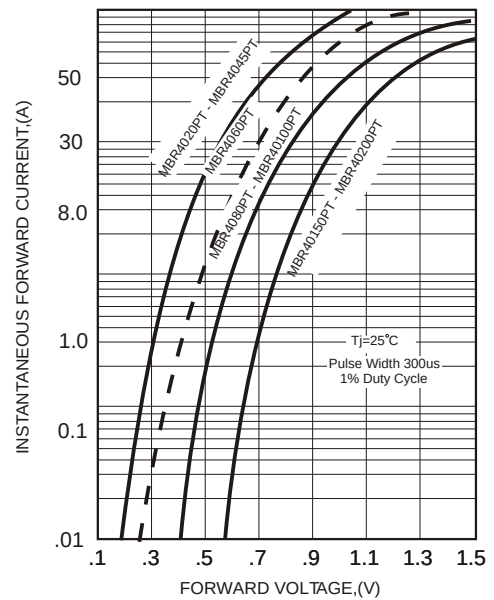


FIG.3-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

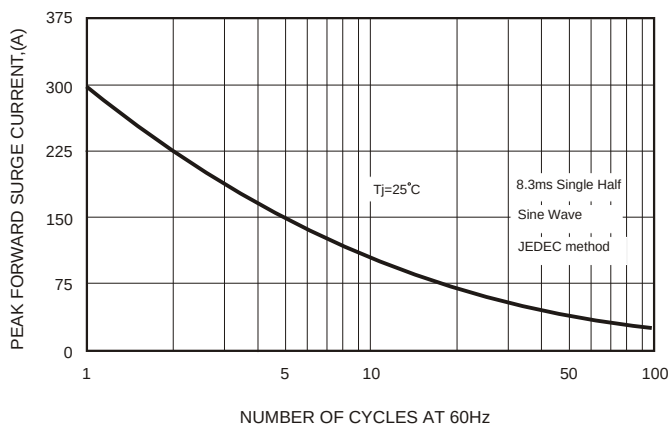


FIG.4-TYPICAL JUNCTION CAPACITANCE

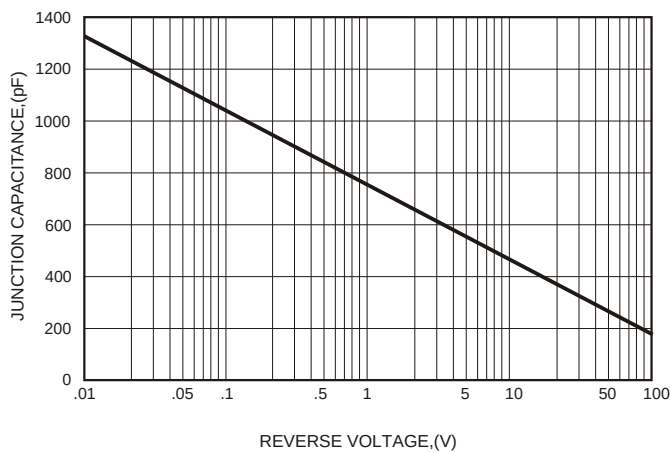
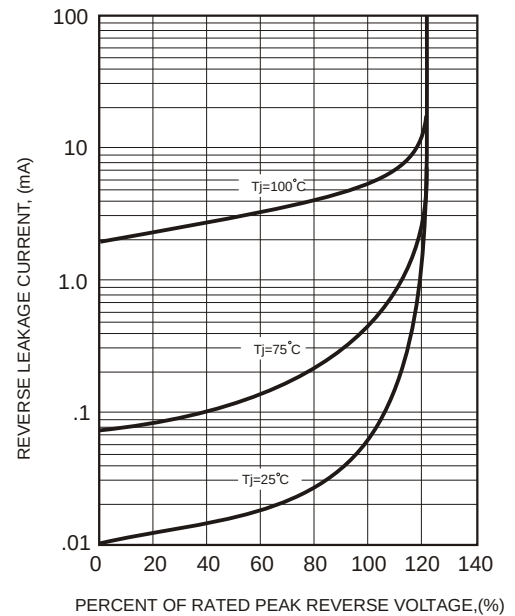
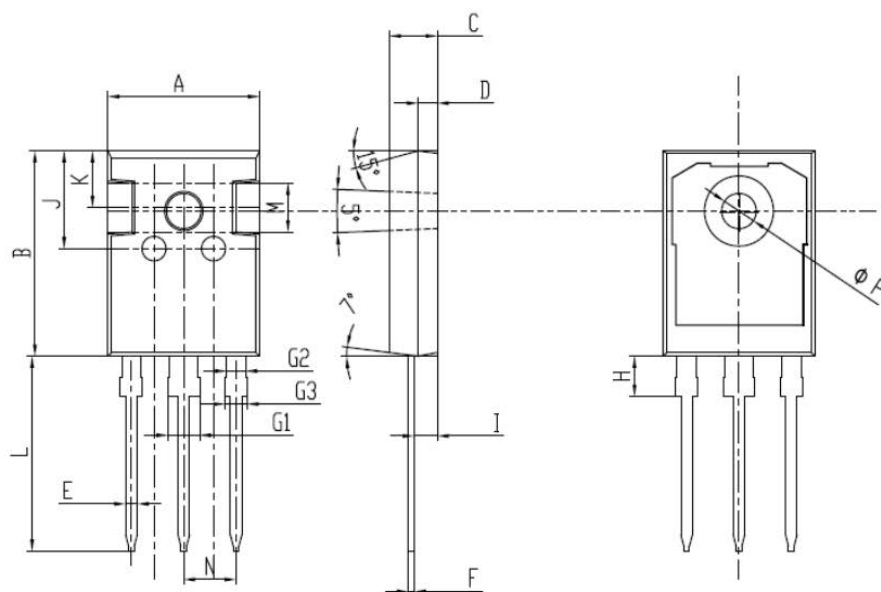


FIG.5 - TYPICAL REVERSE
CHARACTERISTICS





TO-247 Package Information



项目	规范(mm)	
	MIN	MAX
A	15.70	15.90
B	20.90	21.10
C	4.90	5.10
D	1.90	2.10
E	1.10	1.30
F	0.45	0.75
G1	3.00	3.20
G2	1.85	2.15
G3	2.00	2.20
H	4.00	4.30
I	2.30	2.50
J	9.90	10.10
K	5.70	5.90
L	19.80	20.20
M	4.85	5.15
N	5.286	5.586
Φ P	3.40	3.60



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