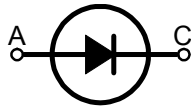


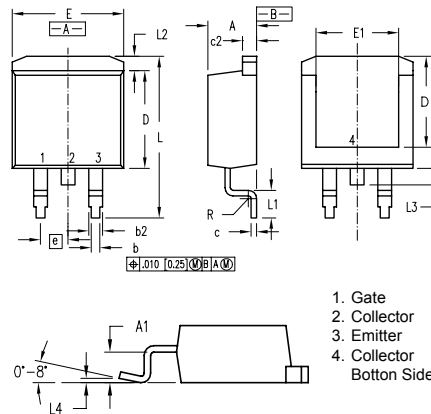
# MBRB2515L

## High T<sub>jm</sub> Low IRRM Schottky Barrier Diodes



A=Anode, C=Cathode, TAB=Cathode

Dimensions TO-263(D<sup>2</sup>PAK)



Dim.	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.06	4.83	.160	.190
A1	2.03	2.79	.080	.110
b	0.51	0.99	.020	.039
b2	1.14	1.40	.045	.055
c	0.46	0.74	.018	.029
c2	1.14	1.40	.045	.055
D	8.64	9.65	.340	.380
D1	8.00	8.89	.315	.350
E	9.65	10.29	.380	.405
E1	6.22	8.13	.245	.320
e	2.54 BSC		.100 BSC	
L	14.61	15.88	.575	.625
L1	2.29	2.79	.090	.110
L2	1.02	1.40	.040	.055
L3	1.27	1.78	.050	.070
L4	0	0.20	0	.008
R	0.46	0.74	.018	.029

	V <sub>RRM</sub>	V <sub>RMS</sub>	V <sub>DC</sub>
	V	V	V
<b>MBRB2515L</b>	15	10.5	15

Symbol	Characteristics	Maximum Ratings	Unit
I <sub>AV</sub>	Maximum Average Forward Rectified Current @T <sub>C</sub> =90°C	25	A
I <sub>FSM</sub>	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	150	A
dv/dt	Voltage Rate Of Change (Rated V <sub>R</sub> )	10000	V/us
V <sub>F</sub>	Maximum Forward Voltage At (Note 1) I <sub>F</sub> =19A @T <sub>J</sub> =70°C I <sub>F</sub> =25A @T <sub>J</sub> =70°C I <sub>F</sub> =25A @T <sub>J</sub> =25°C	0.28 0.42 0.45	V
I <sub>R</sub>	Maximum DC Reverse Current At Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	15 200	mA
R <sub>θJC</sub>	Typical Thermal Resistance (Note 3)	1.0	°C/W
C <sub>J</sub>	Typical Junction Capacitance Per Element (Note 2)	1150	pF
T <sub>J</sub>	Operating Temperature Range	-55 to +125	°C
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C

NOTES: 1. 300us Pulse Width, Duty Cycle 2%.  
2. Measured At 1.0MHz And Applied Reverse Voltage Of 4.0V DC.  
3. Thermal Resistance Junction To Case.

### FEATURES

- \* Guard ring for transient protection
- \* Low power loss, high efficiency
- \* High current capability, low V<sub>F</sub>
- \* High surge capacity
- \* For use in low voltage, high frequency inverters, free whelling, and polarity protection applications
- \* RoHS compliance

### MECHANICAL DATA

- \* Case: D<sup>2</sup>PAK molded plastic
- \* Polarity: As marked on the body
- \* Weight: 2 grams



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## High T<sub>jm</sub> Low IRRM Schottky Barrier Diodes

FIG. 1 - FORWARD CURRENT DERATING CURVE

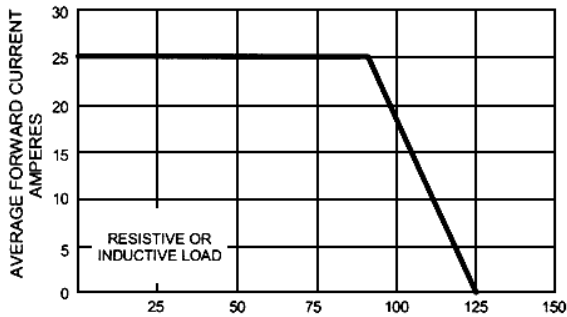


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

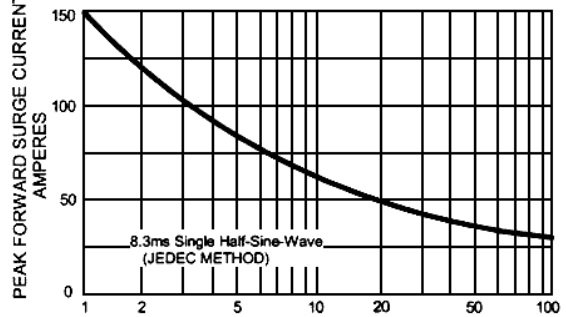


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

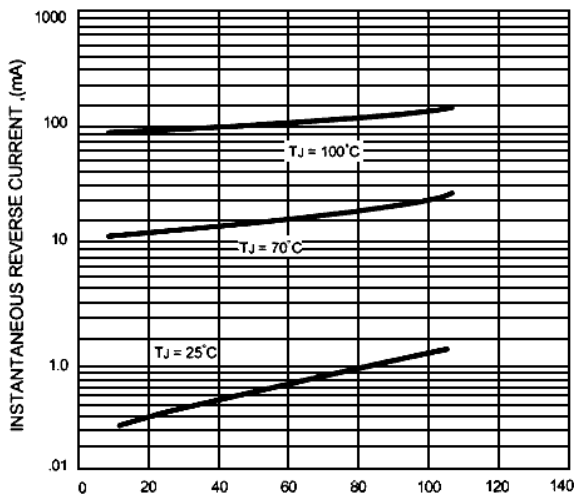


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

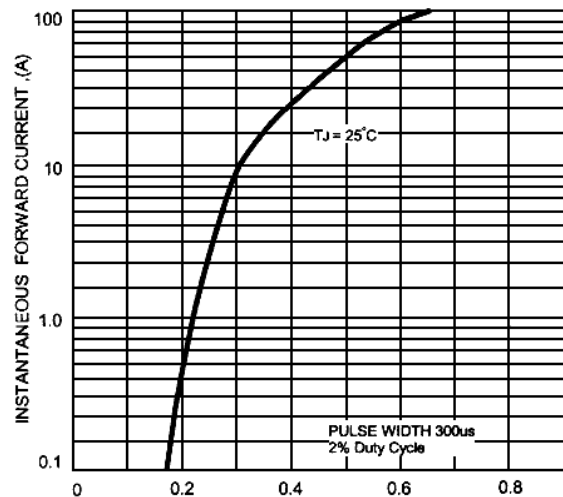


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

