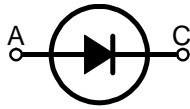
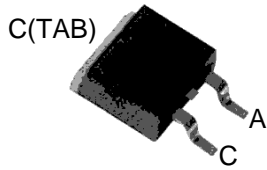


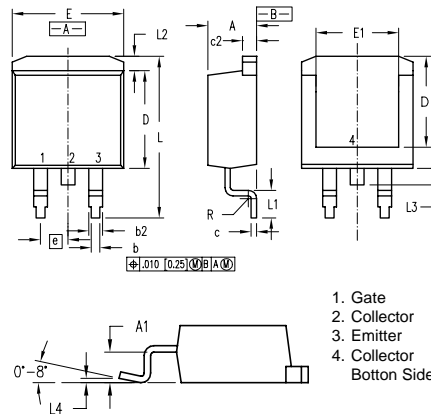
# MBRB2515L

Wide Temperature Range and High  $T_{jm}$  Schottky Barrier Rectifiers



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

	$V_{RRM}$	$V_{RMS}$	$V_{DC}$
	V	V	V
<b>MBRB2515L</b>	15	10.5	15

Symbol	Characteristics	Maximum Ratings	Unit
$I_{(AV)}$	Maximum Average Forward Rectified Current @ $T_c=90^\circ C$	25	A
$I_{FSM}$	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 $V_R$ )	10000	V/us
$V_F$	Maximum Forward Voltage At (Note 1) $I_F=19A$ @ $T_J=70^\circ C$ $I_F=25A$ @ $T_J=70^\circ C$ $I_F=25A$ @ $T_J=25^\circ C$	0.28 0.42 0.45	V
$I_R$	Maximum DC Reverse Current At Rated DC Blocking Voltage @ $T_J=25^\circ C$ @ $T_J=100^\circ C$	15 200	mA
$R_{\theta JC}$	Typical Thermal Resistance (Note 3)	1.0	$^\circ C/W$
$C_J$	Typical Junction Capacitance Per Element (Note 2)	1150	pF
$T_J$	Operating Temperature Range	-55 to +125	$^\circ C$
$T_{STG}$	Storage Temperature Range	-55 to +150	$^\circ C$

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  $V_F$
- \* High surge capacity
- \* For use in low voltage, high frequency inverters, free whelling, and polarity protection applications

## MECHANICAL DATA

- \* Case: D<sup>2</sup>PAK molded plastic
- \* Polarity: As marked on the body
- \* Weight: 0.06 ounces, 1.7 grams



# MBRB2515L

## Wide Temperature Range and High $T_{jm}$ Schottky Barrier Rectifiers

FIG. 1 - FORWARD CURRENT DERATING CURVE

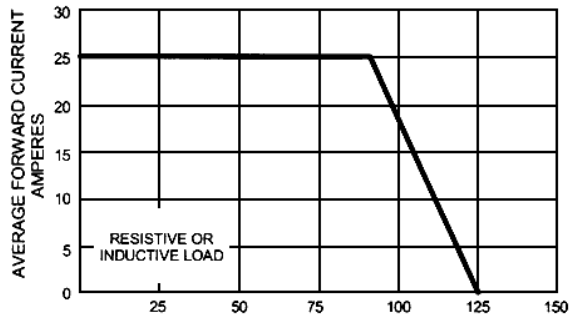


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

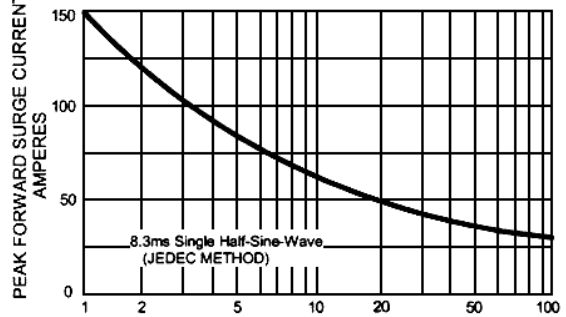


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

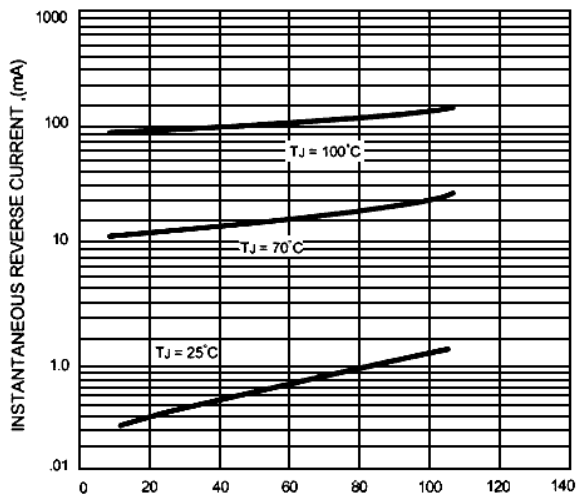


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

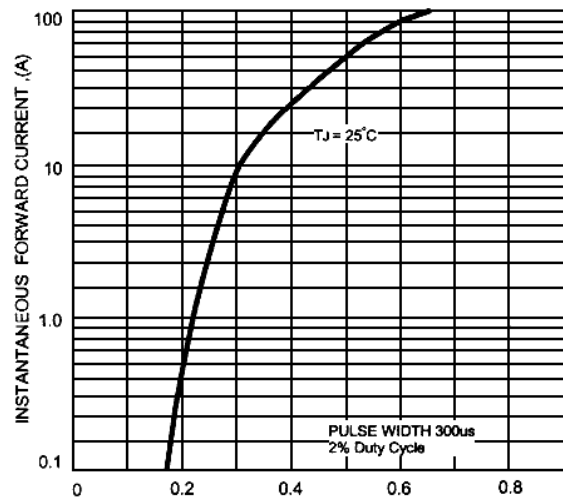


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

