



High frequency operation
 Low forward voltage drop
 High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
 Guard ring for enhanced ruggedness and long term reliability
 Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

: ITO-220AC
 Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
 : Tin plated leads, solderable per J-STD-002 and JESD22-B102
 : As marked

($T_a=25$ Unless otherwise specified)

Device marking code			MBRL5100FA
Repetitive Peak Reverse Voltage	VRRM	V	100
Average Rectified Output Current @60Hz sine wave, R-load, $T_c=135$	I _O	A	5
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, $T_a=25$	I _{FSM}	A	100
Current Squared Time @1ms $t \leq 8.3ms$ $T_j=25$	I ² t	A ² s	41.5
Storage Temperature	T _{stg}		-55 ~ +150
Junction Temperature	T _j		-55 ~ +150

$T_a=25$ Unless otherwise specified

Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=5.0A	0.75
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	mA	VRM=VRRM $T_a=25$	0.5
	IRRM2		VRM=VRRM $T_a=125$	20

Note1:Pulse test:300uS pulse width,1% duty cycle

Note2:Pulse test:pulse width 40mS



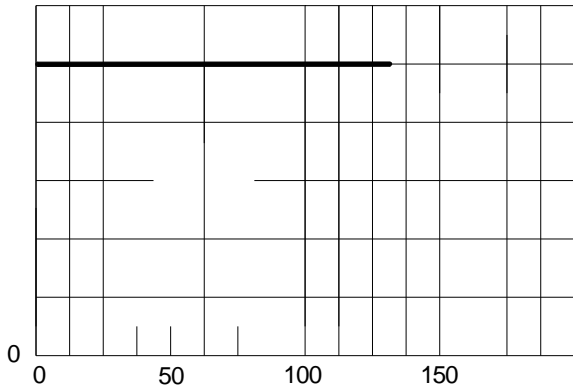
T_a=25 Unless otherwise specified

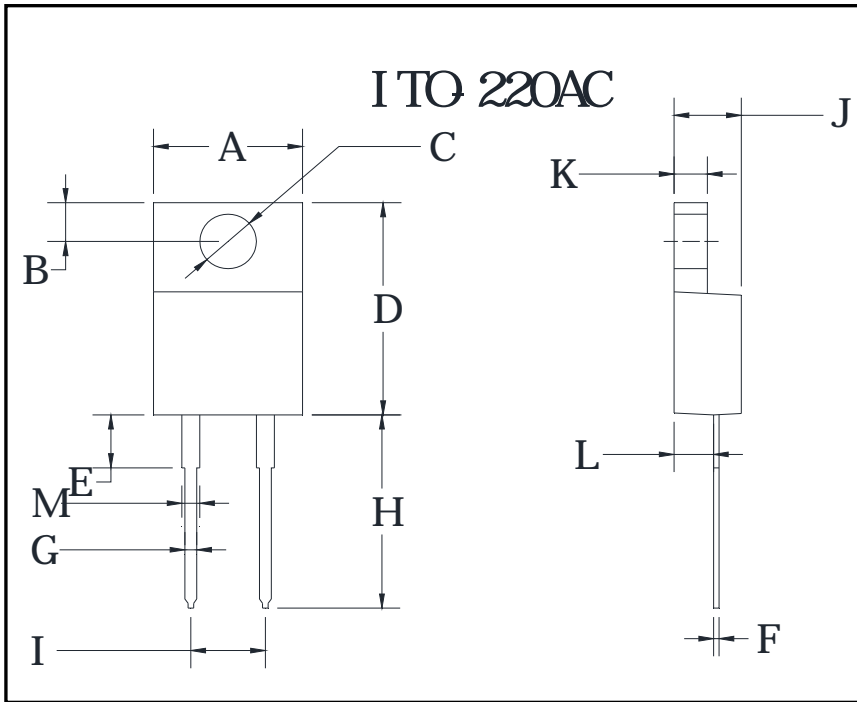
Thermal Resistance	Between junction and case	R J-C	/W	4.0

(Example)

MBRL5100FA	Approximate 1.6	50	1000	5000	Tube

(Typical)





Dim	Min	Max
A	9.8	10.2
B	2.25	2.75
C	2.95	3.45
D	14.75	15.25
E	3.5	4.1
F	0.45	0.75
G	0.45	0.75
H	13.35	14.15
I	4.97	5.23
J	4.3	4.8
K	2.5	2.74
L	2.58	2.82
M	1.03	1.43



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