



Schottky Barrier Rectifiers
Reverse Voltage - 40 to 200 V
Forward Current - 30 A

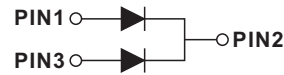
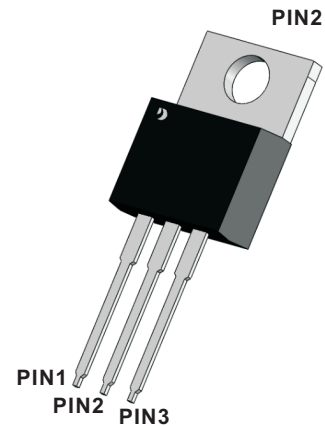
TO-220ABW

Features

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any

Mechanical data

- Case: TO-220ABW
- Approx Weight: 1.87g (0.066oz)
- Lead free finish, RoHS compliant
- Case Material: "Green" molding compound,
UL flammability classification 94V-0, "Halogen-free".



ROHS
COMPLIANT

Maximum Ratings And Electrical Characteristics

Ratings At 25°C Ambient Temperature Unless Otherwise Specified

Characteristics	TO-220	MBR3040CTS	MBR3045CTS	MBR3060CTS	MBR30100CTS	MBR30150CTS	MBR30200CTS	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	32	42	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	45	60	100	150	200	V
Maximum Average Forward Rectified Current per leg per device	I _{F(AV)}	15 30						A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) per leg	I _{FSM}	200						A
Max Instantaneous Forward Voltage at 15 A(per leg)	V _F	0.75		0.80	0.88	0.92	0.95	V
Maximum DC Reverse Current T _J = 25°C at Rated DC Reverse Voltage T _J =100°C	I _R	0.1 20			0.05 20			mA
Typical Thermal Resistance	R _{θJA} R _{θJC}	45 5						°C/W
Typical Junction Capacitance (f=1MHz, V _R =4V)	C _j	600		400				pF
Operating Junction Temperature Range	T _j	-55 ~ +150				-55 ~ +175		°C
Storage Temperature Range	T _{stg}	-55 ~ +150				-55 ~ +175		°C



Fig.1 Typical Forward Current Derating Curve

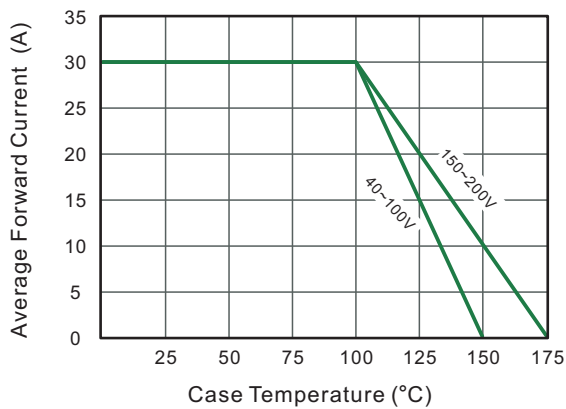


Fig.2 Typical Reverse Characteristics

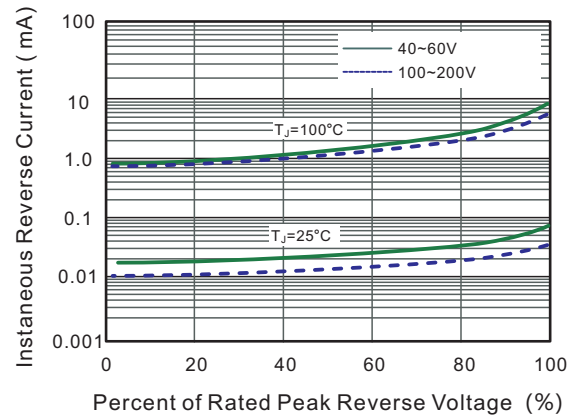


Fig.3 Typical Forward Characteristic(per leg)

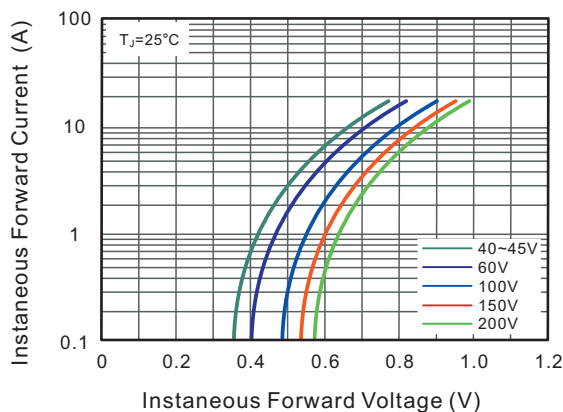


Fig.4 Typical Junction Capacitance

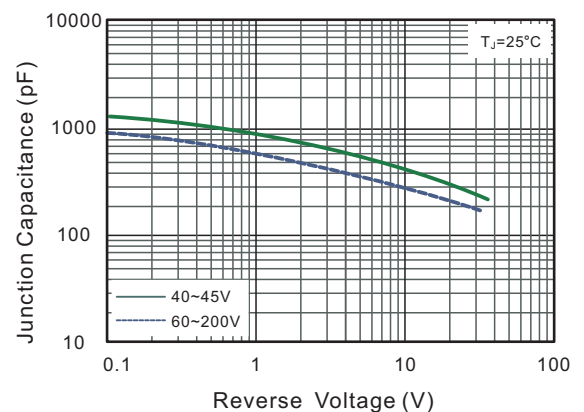


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

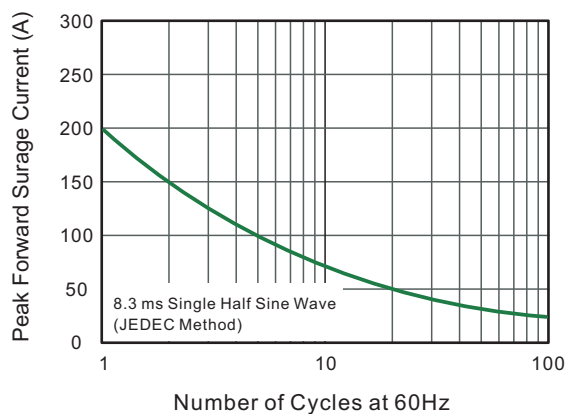
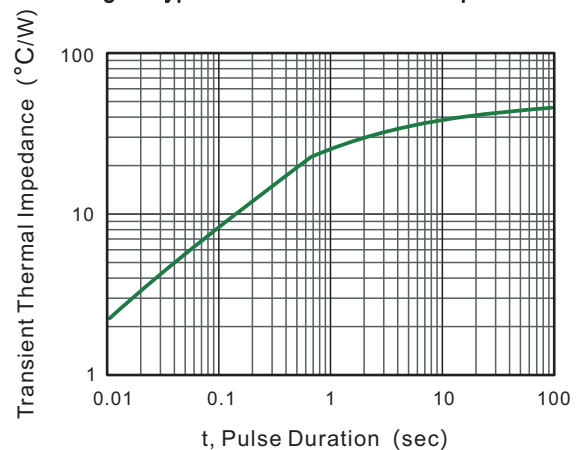


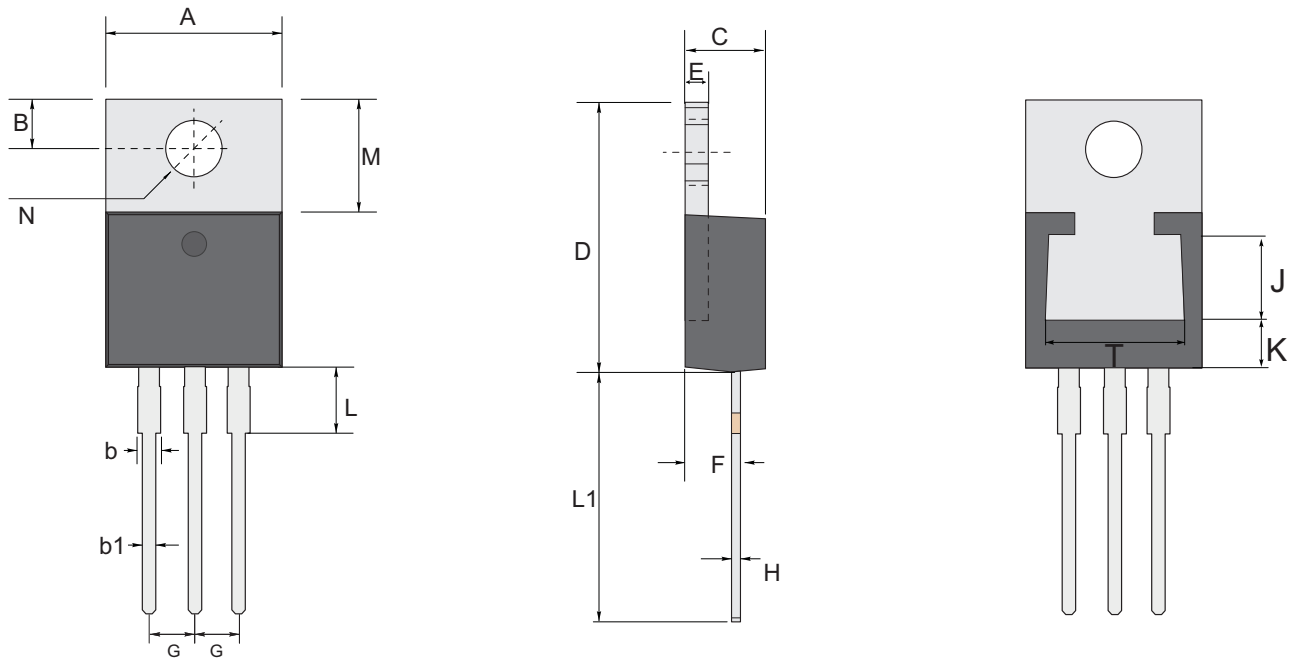
Fig.6- Typical Transient Thermal Impedance





Package Outline
Through Hole Package ; 3 leads

TO-220ABW



TO-220ABW mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N	J	T	K
mm	max	10.45	2.94	1.77	0.94	4.76	16.0	1.40	3.37	2.54 typ.	0.64	4.20	14.79	6.39 typ.	3.84 typ.	4.65 ref.	7.7 ref.	3.22 ref.
	typ	9.94	2.74	1.27	0.81	4.57	15.09	1.27	3.07		0.38	3.89	13.18					
	min	9.85	2.54	1.14	0.62	4.42	14.6	1.14	2.77		0.35	2.80	13.08					
mil	max	411	116	70	37	187	630	55	133	100 typ.	25	165	582	252 typ.	151 typ.	183 ref.	303 ref.	127 ref.
	typ	391	108	50	32	180	594	50	121		15	153	519					
	min	388	100	45	24	174	575	45	109		14	110	515					

Marking

Type number	Marking code
MBR3040CTS	MBR3040CTS
MBR3045CTS	MBR3045CTS
MBR3060CTS	MBR3060CTS
MBR30100CTS	MBR30100CTS
MBR30150CTS	MBR30150CTS
MBR30200CTS	MBR30200CTS



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