



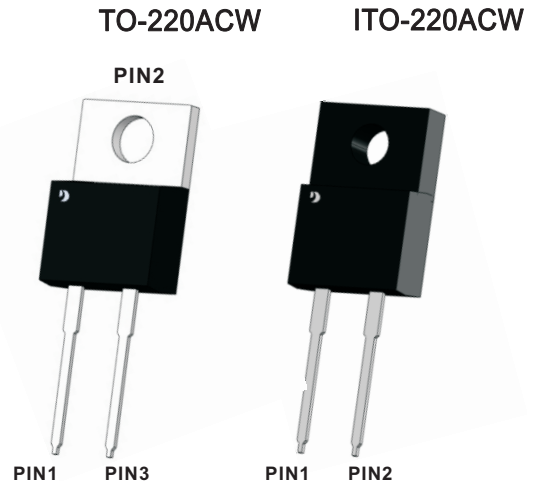
Schottky Barrier Rectifiers
Reverse Voltage - 40-200 Volts
Forward Current - 10Amperes

Features

- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications.
- Green molding (HalogenFree)

Mechanical data

- Case: TO-220ACW
- Approx. Weight: 1.855g (0.065oz)
- Case: ITO-220ACW
- Approx. Weight: 1.483g (0.052oz)



Maximum Ratings And Electrical Characteristics

Ratings At 25°C Ambient Temperature Unless Otherwise Specified

Parameter	TO-220ACW	MBR1040C	MBR1045C	MBR1050C	MBR1060C	MBR1080C	MBR10100C	MBR10150C	MBR10200C	Units
	ITO-220ACW	MBR1040F	MBR1045F	MBR1050F	MBR1060F	MBR1080F	MBR10100F	MBR10150F	MBR10200F	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	32	35	42	56	70	105	140	V
Maximum DC blocking Voltage	V_{DC}	40	45	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	10								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150								A
Instantaneous forward voltage at 10 A	V_F	0.55		0.75		0.85		0.90		V
Maximum instantaneous reverse current at rated DC blocking voltage $T_a=25^{\circ}C$ $T_a=100^{\circ}C$	I_R	0.05 20								mA
Maximum Thermal Resistance Junction To Case ITO-220ACW TO-220ACW	$R_{\theta JC}$	3.5 2.3								$^{\circ}C/W$
Operating Junction Temperature Range	T_j	-55 ~ +150						-55 ~ +175		$^{\circ}C$
Storage Temperature Range	T_{stg}	-55 ~ +150						-55 ~ +175		$^{\circ}C$



Fig.1 Typical Forward Current Derating Curve

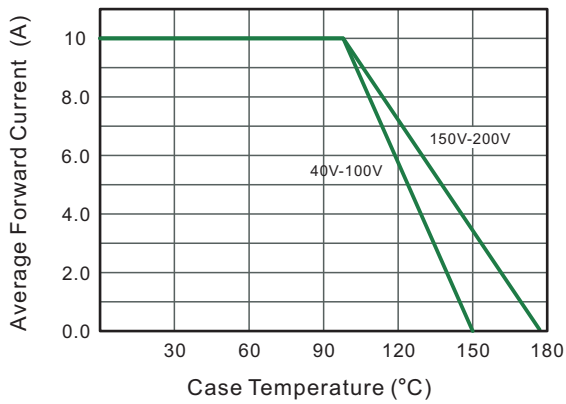


Fig.2 Typical Reverse Characteristics

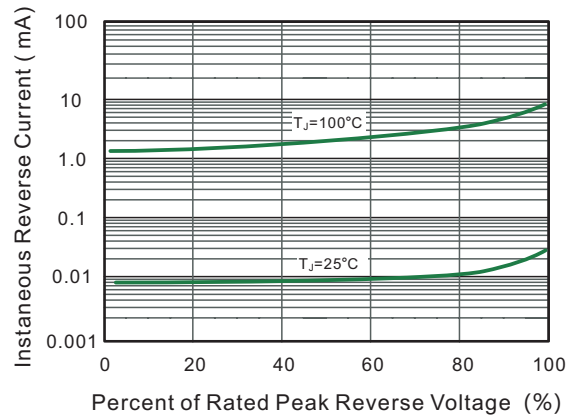


Fig.3 Typical Forward Characteristic

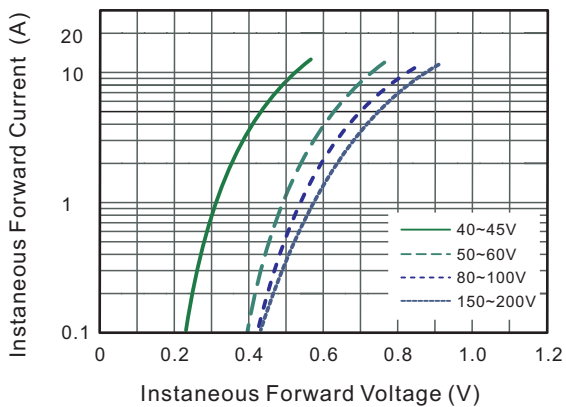
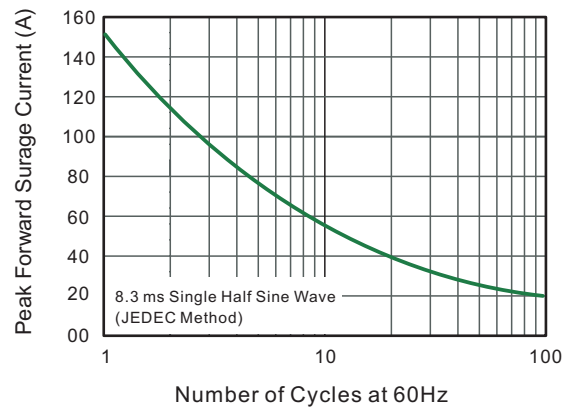


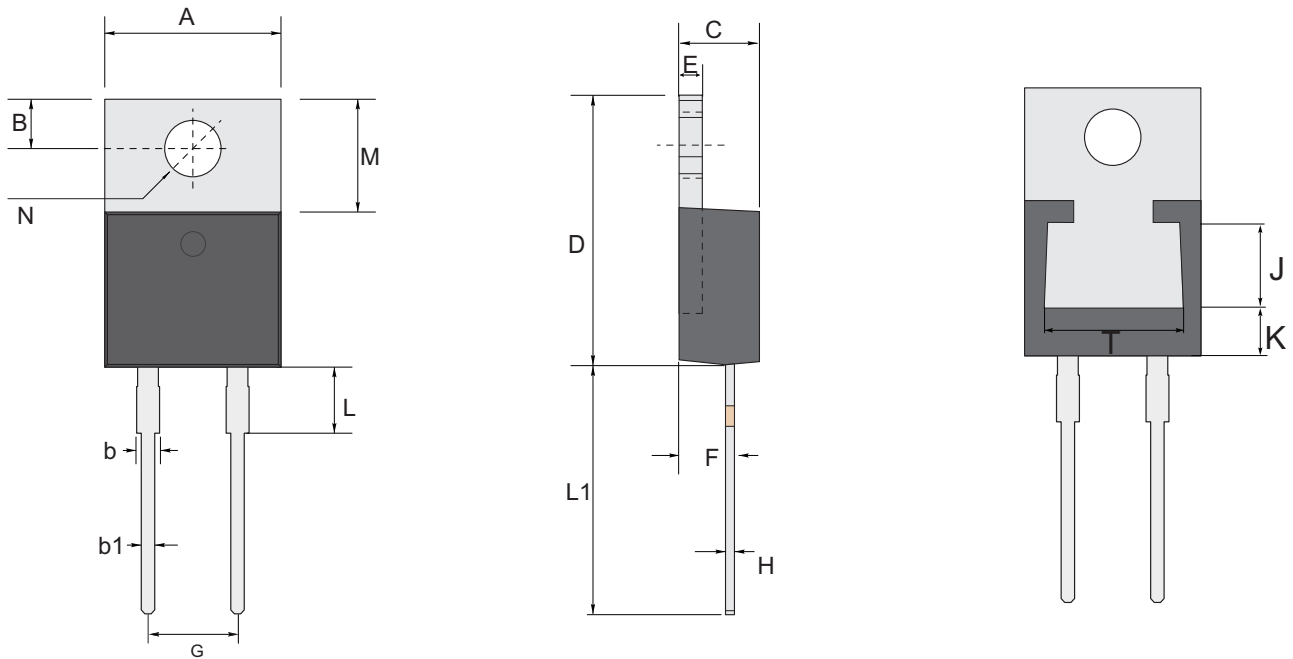
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current





Package Outline
Through Hole Package ; 2 leads

TO-220ACW



TO-220ACW 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	5.1 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	201 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					

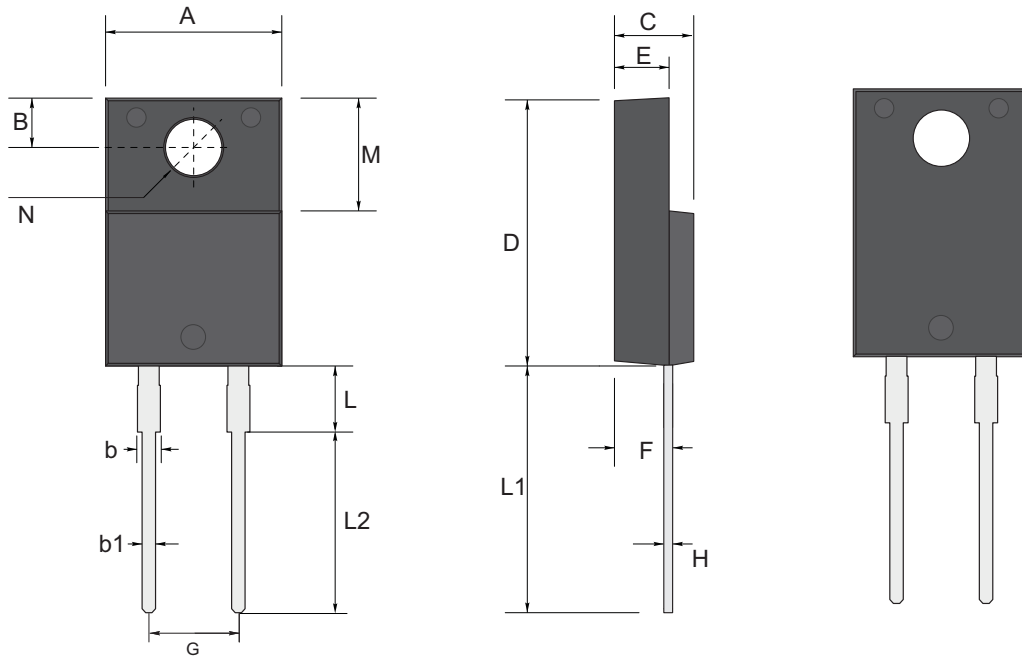
Marking

Type number	Marking code
MBR10XXC MBR10XXXC	MBR10XXC MBR10XXXC



Package Outline
Through Hole Package ; 2 leads

ITO-220ACW



ITO-220ACW mechanical data

UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	L2	M	N
mm	max	10.5	2.85	1.4	0.8	4.7	16.0	2.9	3.55	5.1 typ.	0.70	2.9	14.3	11.8	7.0	3.4 typ.
	typ	10.0	2.70	1.2	0.6	4.5	15.0	2.7	3.25		0.55	2.5	13.5	11.0	6.8	
	min	9.85	2.54	1.1	0.5	4.4	14.7	2.5	2.95		0.41	2.3	13.0	10.5	6.3	
mil	max	413	112	55	31	185	630	114	140	201 typ.	28	114	563	465	276	134 typ.
	typ	394	106	47	24	177	591	106	128		22	98	531	433	268	
	min	388	100	43	20	173	579	98	116		16	91	512	413	248	

Marking

Type number	Marking code
MBR10XXF MBR10XXXF	MBR10XXF MBR10XXXF



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