



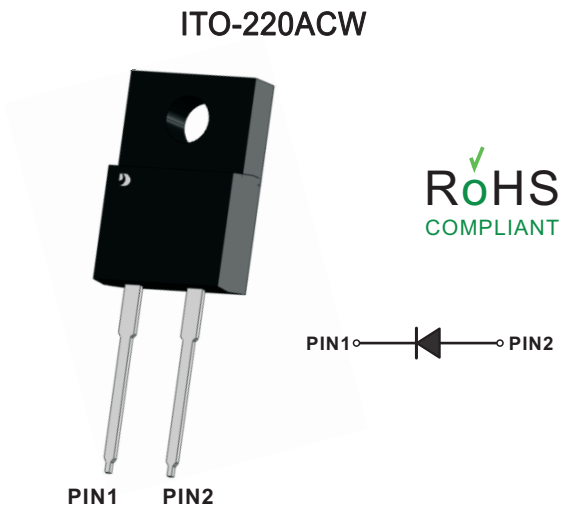
Fast Recovery EPI Diodes
Reverse Voltage - 100 Volts
Forward Current - 30Amperes

Features

- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

Mechanical Data

- Case: ITO-220ACW
- Approx Weight: 1.483g (0.052oz)
- RoHS compliant
- Case Material: “Green” molding compound,
UL flammability classification 94V-0, “Halogen-free”.



Maximum Ratings And Electrical Characteristics

Ratings At 25°C Ambient Temperature Unless Otherwise Specified

Parameter	Symbols	MBR30100C	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Average Rectified Forward Current	I_F	30	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	200	A
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JA}$	4 50	°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

Parameter	Symbols	Test Conditions	Min	Typ	Max	Units
Breakdown voltage	V_{BR}	$I_R=0.1mA$	100			V
Instantaneous forward voltage	V_F	$I_F=5A, T_J=25^{\circ}C$ $I_F=30A, T_J=25^{\circ}C$			0.65 0.90	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_J=25^{\circ}C$			30	uA



Fig.1 Typical Forward Current Derating Curve

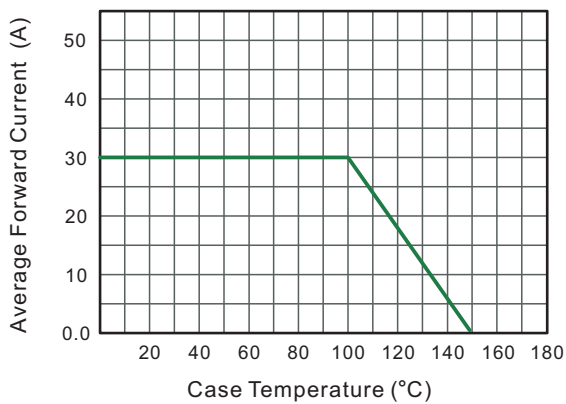


Fig.2 Typical Reverse Characteristics

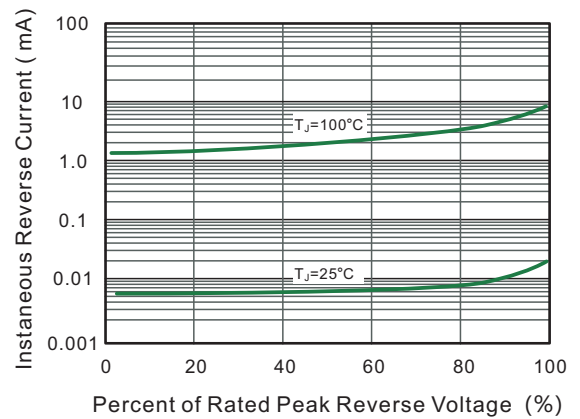


Fig.3 Typical Forward Characteristic

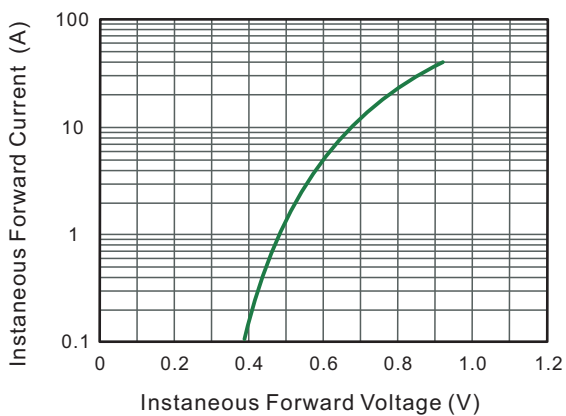
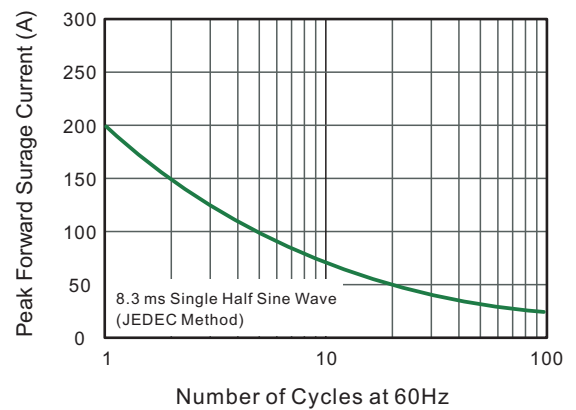


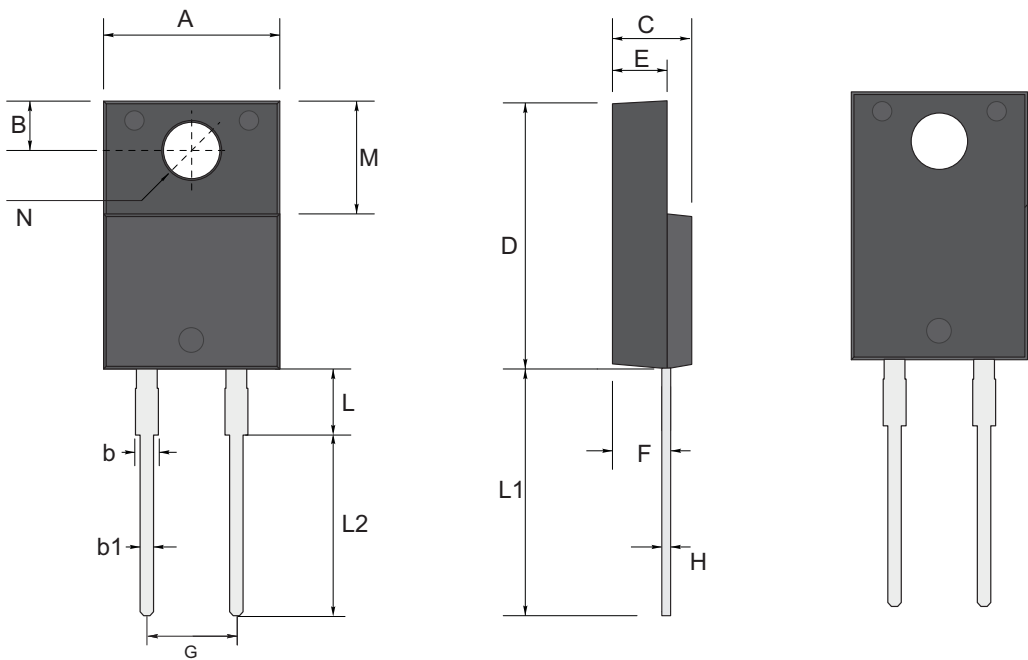
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current





Package Outline
Through Hole Package ; 2 leads

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
MBR30100F	MBR30100F



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