



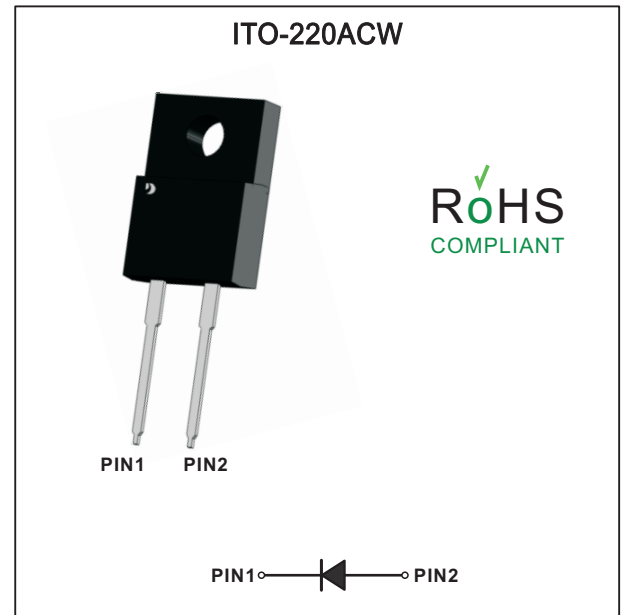
Fast Recovery EPI Diodes
Reverse Voltage - 200~600 Volts
Forward Current - 10 Amperes

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
- Solder dip 275 °C max. 7s, per JESD 22-B106

Mechanical Data

- Case: ITO-220ACW
- Approx. Weight: 1.483g (0.052oz)
- Terminals: Lead solderable per MIL-STD-202, Method 208
- 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	MUR1020F	MUR1040F	MUR1060F	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking Voltage	V_{DC}	200	400	600	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}	125	150	150	A
Instantaneous forward voltage at 10 A	V_F	1.0	1.3	1.6	V
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	35			ns
Maximum instantaneous reverse current at rated DC blocking voltage $T_j=25^{\circ}C$ $T_j=125^{\circ}C$	I_R	10 500			μA
Maximum Thermal Resistance Junction To Case	$R_{\theta JC}$	4			$^{\circ}C/W$
Operation Junction Temperature and Storage Temperature	T_j, T_{stg}	-55 ~ +150			$^{\circ}C$

NOTE 1: $I_F=0.5A, I_R=1A, I_{rr}=0.25A$



Fig.1 Typical Forward Current Derating Curve

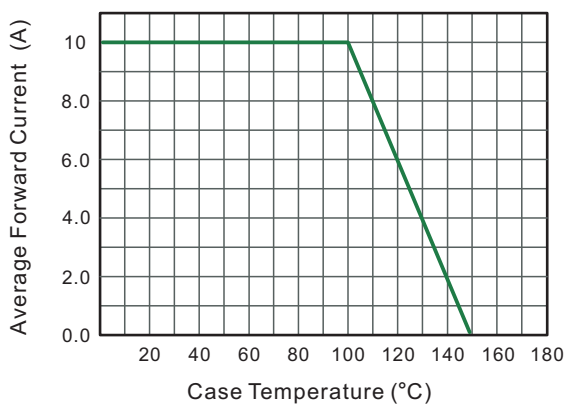


Fig.2 Typical Reverse Characteristics

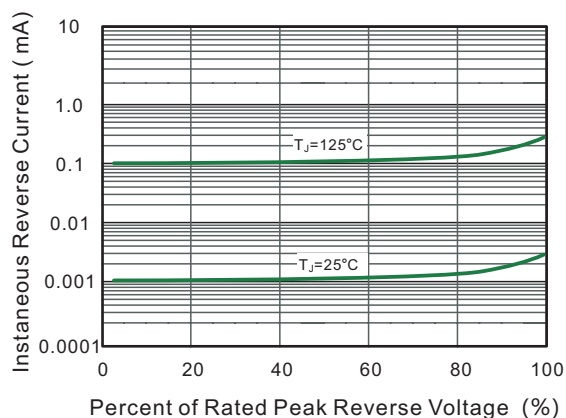


Fig.3 Typical Forward Characteristic

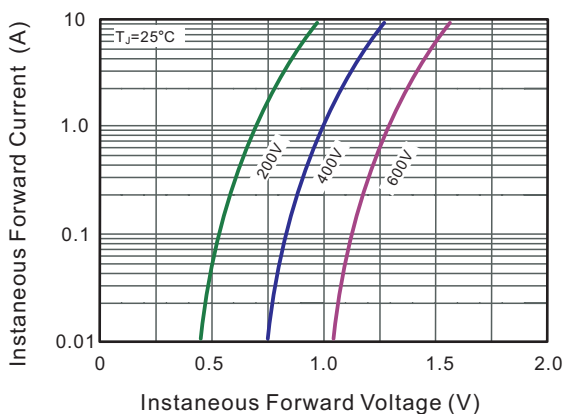
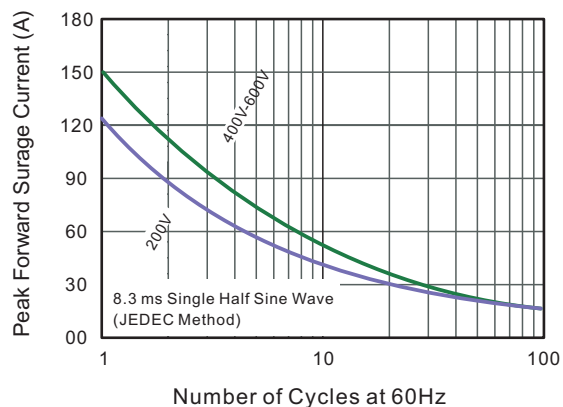


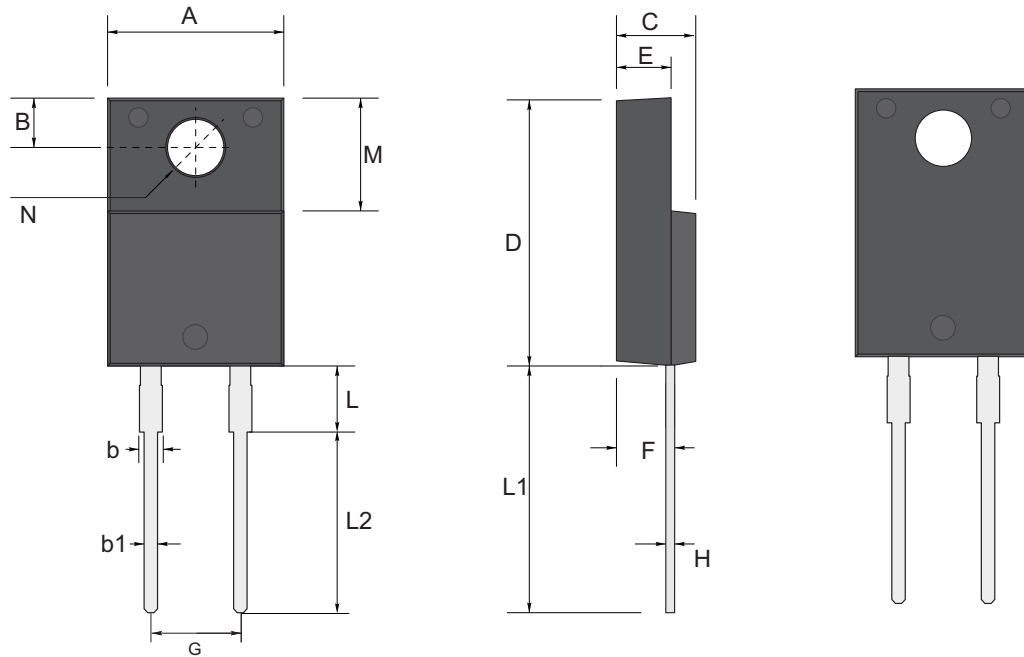
Fig.4 Maximum Non-Repetitive Peak Forward Surge Current





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
MUR10XXF	MUR10XXF



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