



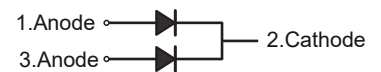
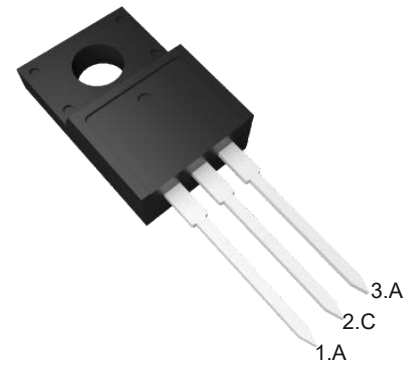
MURF2020TF

Surface Mount Fast Recovery Diodes

Features

- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance

TO-220F



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current (at $T_C=100^\circ\text{C}$)	per Leg	10	A
	per device	20	
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	125	A
Maximum Instantaneous Forward Voltage at 10 A (per leg)	V_F	1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	10	μA
	$T_A=125^\circ\text{C}$	500	
Maximum Thermal Resistance Junction To Case	$R_{\theta JC}$	4	$^\circ\text{C/W}$
Maximum Reverse Recovery Time ^{Note1}	T_{rr}	35	nS
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

Note:

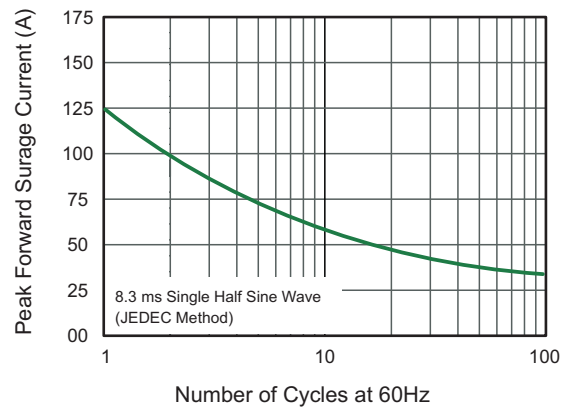
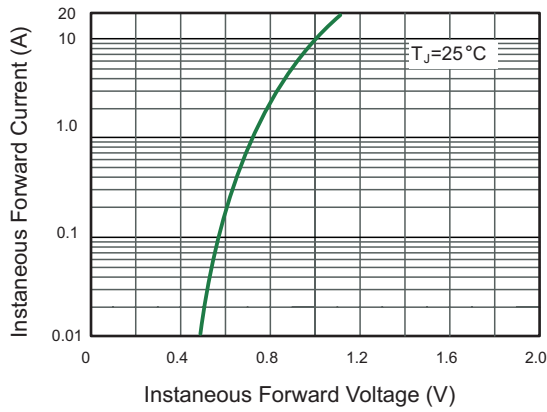
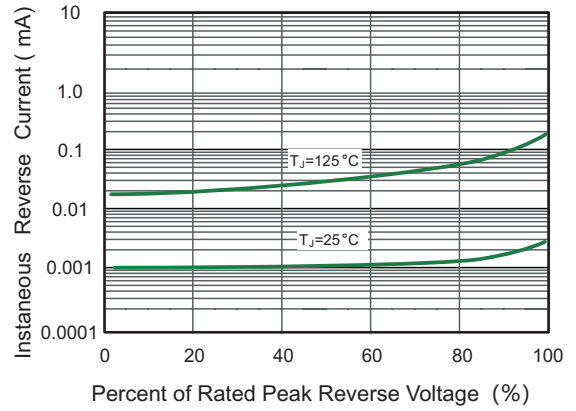
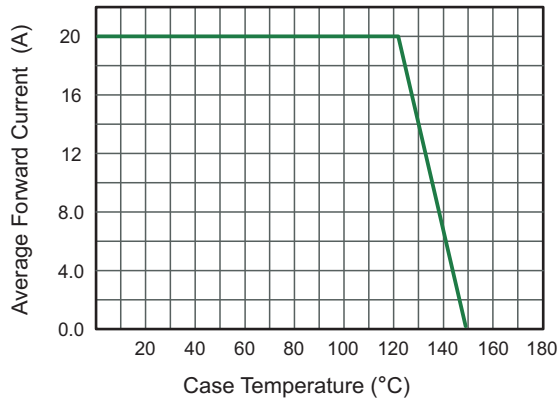
1. Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$.



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Typical Characteristic Curves





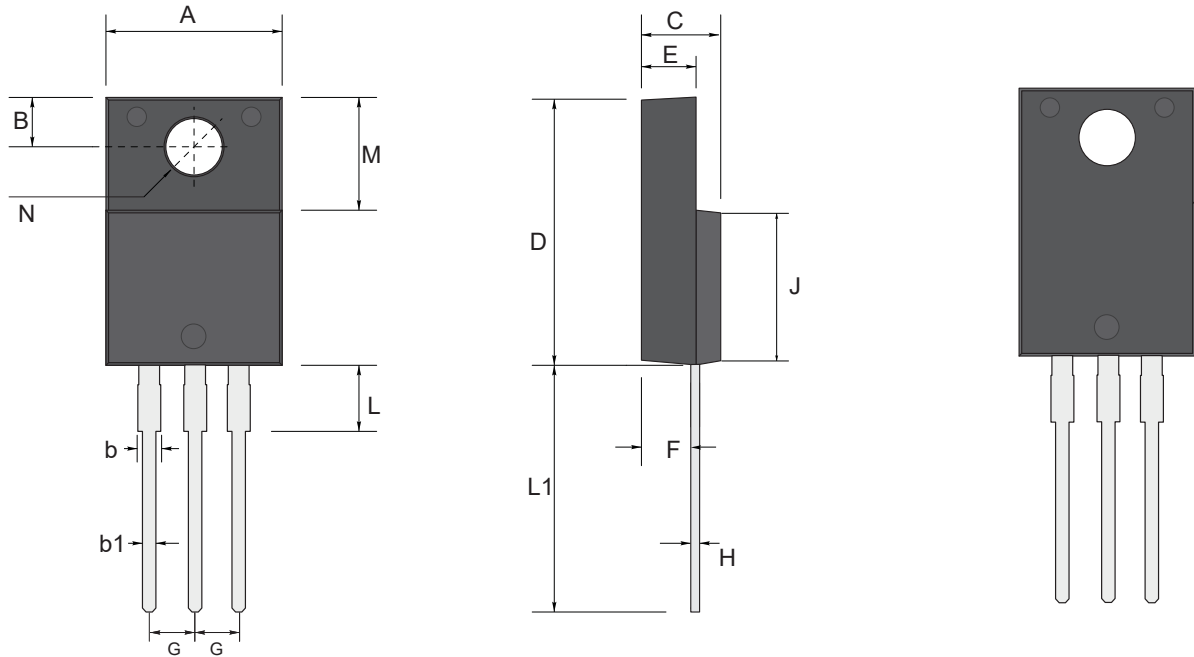
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Package Outline

TO-220F

Dimensions in mm



UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N
mm	max	10.5	2.85	1.4	0.8	4.7	16.0	2.9	2.8	2.54 TYPICAL	0.70	2.9	14.3	7.0	3.4 TYPICAL
	typ	10.0	2.70	1.2	0.6	4.5	15.0	2.7	2.7		0.55	2.5	13.5	6.8	
	min	9.85	2.54	1.1	0.5	4.4	14.7	2.5	2.5		0.41	2.3	13.0	6.3	
mil	max	413	112	55	31	185	630	114	110	100 TYPICAL	27	114	563	276	133 TYPICAL
	typ	394	106	47	24	177	590	106	106		22	98	531	267	
	min	388	100	43	20	173	580	98	98		16	91	512	248	