/ Descriptions

Fast Recovery Epi Diodes in a TO-220F Plastic Package.

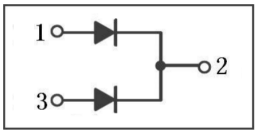
/ Features

High frequency operation, High surge forward current capability, HF Product.

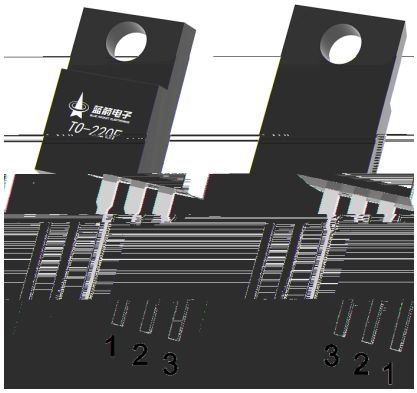
/ Applications

For high frequency, high voltage, high current rectifier diode, freewheeling diode.

/ Equivalent Circuit



/ Pinning



PIN1 Anode PIN 2 Cathode PIN 3 Anode

/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current @Tc=100	$I_{F(AV)}$	10x2	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	125	A
Maximum Thermal Resistance Junction To Case	$R_{\theta Jc}$	4	/W
Operation Junction Temperature and Storage Temperature	T_j , T_{stg}	-40 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	I_F=10A T_C=25		1.35	1.5	V
		I_F=10A T_C=125			1.25	
Instantaneous Reverse Current	I_R	V_R=600V T_a=25			10	μA
		V_R=600V T_a=125			500	
Reverse Recovery Time	t_{rr}	I_F=0.5A I_R=1.0A I_{RR}=0.25A		35	45	ns

/ Electrical Characteristic Curve

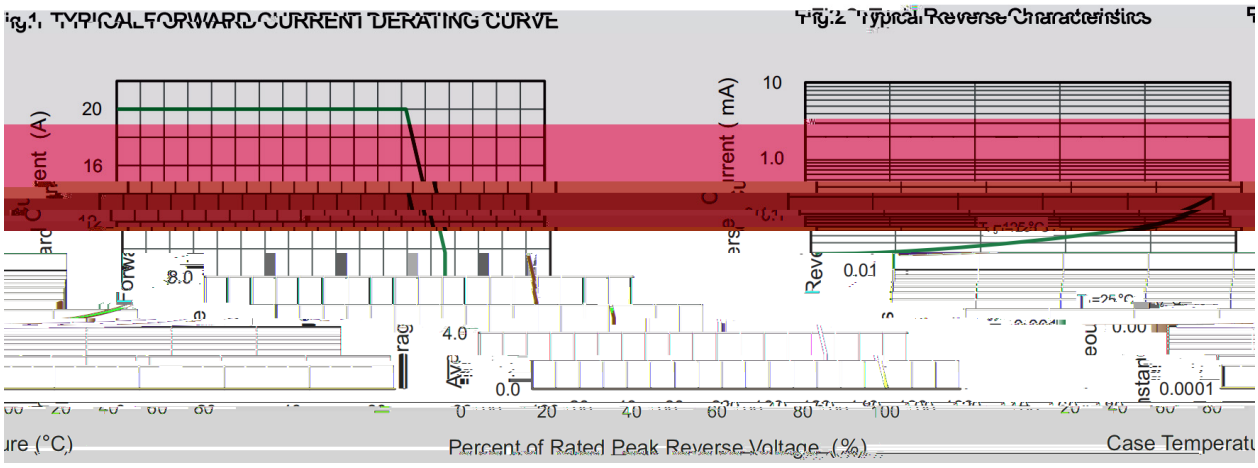
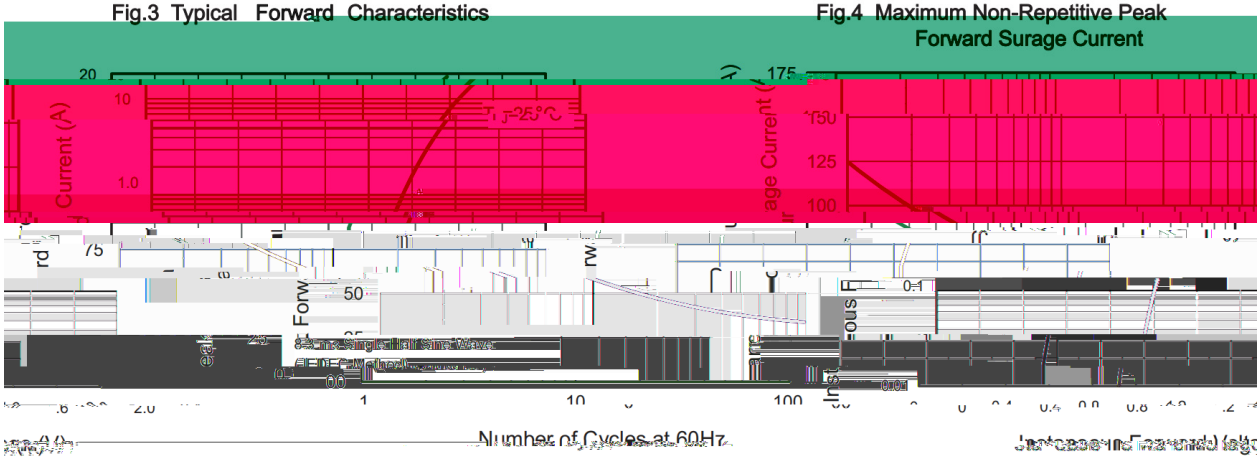
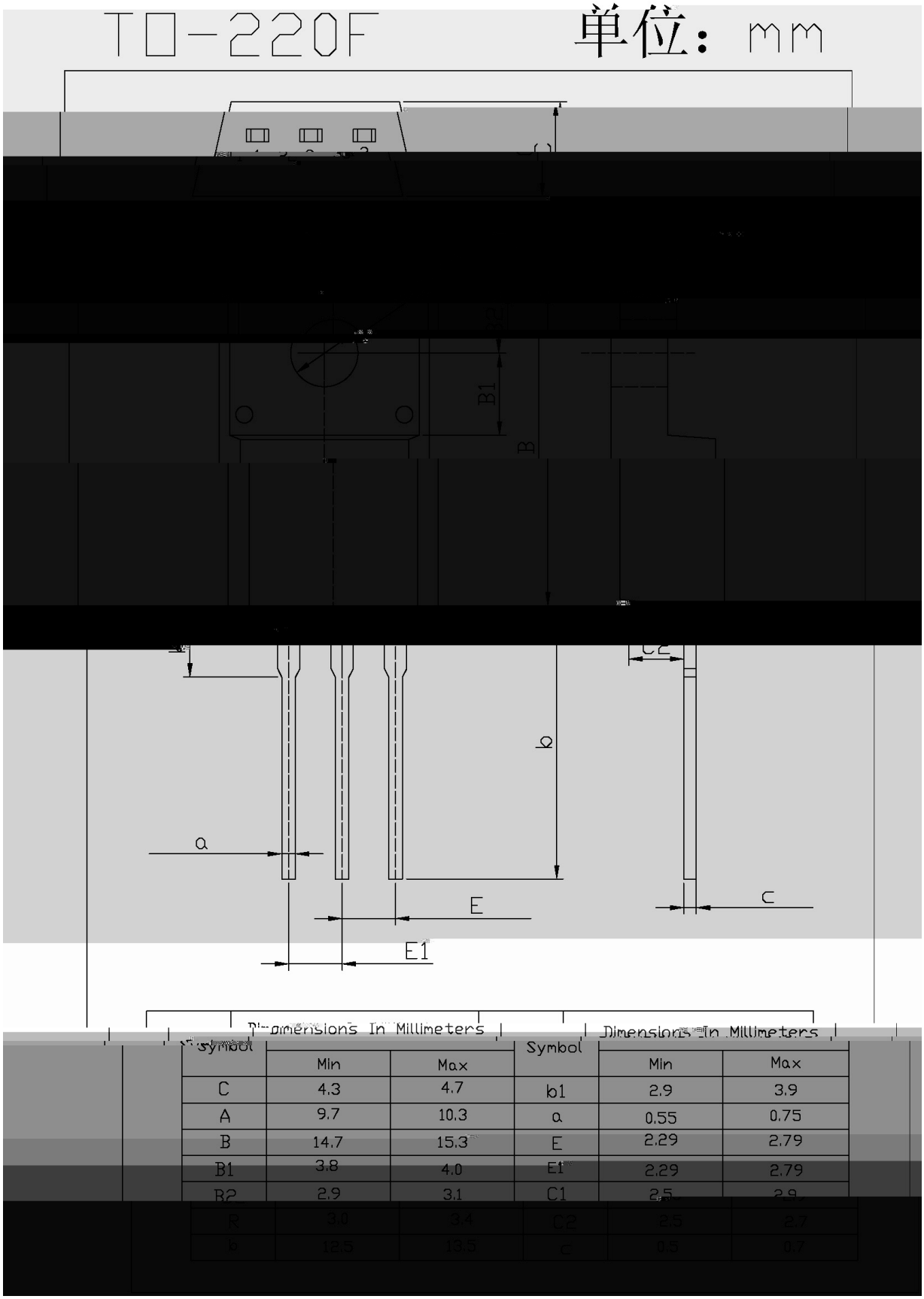


Fig.3 Typical Forward Characteristics

Fig.4 Maximum Non-Repetitive Peak Forward Surage Current

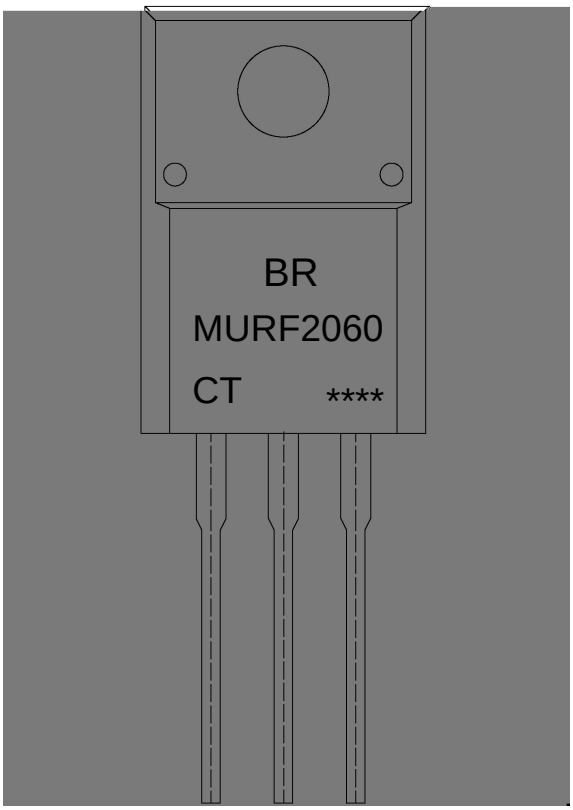


/ Package Dimensions



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
C	4.3	4.7	b1	2.9	3.9
A	9.7	10.3	a	0.55	0.75
B	14.7	15.3	E	2.29	2.79
B1	3.8	4.0	E1	2.29	2.79
B2	2.9	3.1	C1	2.5	2.9
R	3.0	3.4	C2	2.5	2.7
b	12.5	13.5	c	0.5	0.7

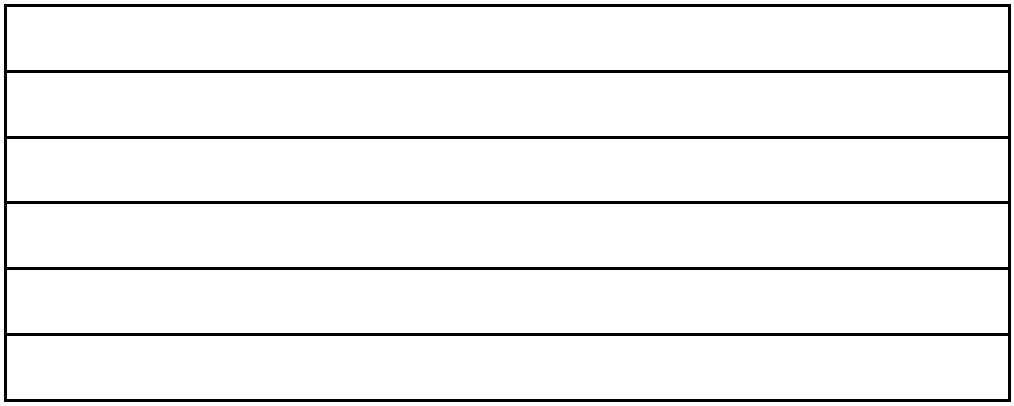
/ Marking Instructions



Note:

BR:	Company Code
MURF2060	Product Type Code
CT:	Internal Structure
****:	Lot No. Code, code change with Lot No

G PD t … • Ž ¢ (x /) / Temperature Profile for Dip Soldering(Pb-Free)



ª ¢ y

1o• Ä ½ “ † 25 ½150 - k ž • 60 ½90sec;

2o• Q › “ † 255 r5 - k ž • 4 Ò 5 r0.5sec;

3o•D N ò i Ò 0 , † 2 ½10 - /sec.

Note:

1.Preheating:25~150 - , Time:60~90sec.

2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.

3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ¯ »] / Resistance to Soldering Heat Test Conditions

“ † y 270 r5 - ž • y 10 r1 sec. Temp.:270±5 Time:10±1 sec