/ Descriptions

TO-220F

Ultrafast Recovery Diode in a TO-220F Plastic Package.

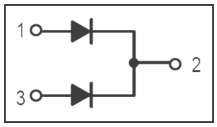
/ Features

Silicon epitaxial process to produce ultrafast recovery diode with low reverse leakage current and high reliability.

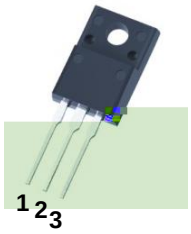
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Anode PIN 2 Cathode PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
RMS Voltage	V_{RMS}	140	V
DC Blocking Voltage	V_{DC}	200	V
Average Forward Current	I_F	2 × 8	A
Non Repetitive Peak Surge Current	I_{FSM}	120	A
Thermal Resistance Junction to Case	R_{Jc}	3.3	/W
Junction and Storage Temperature Range	T_j T_{stg}	-55 150	

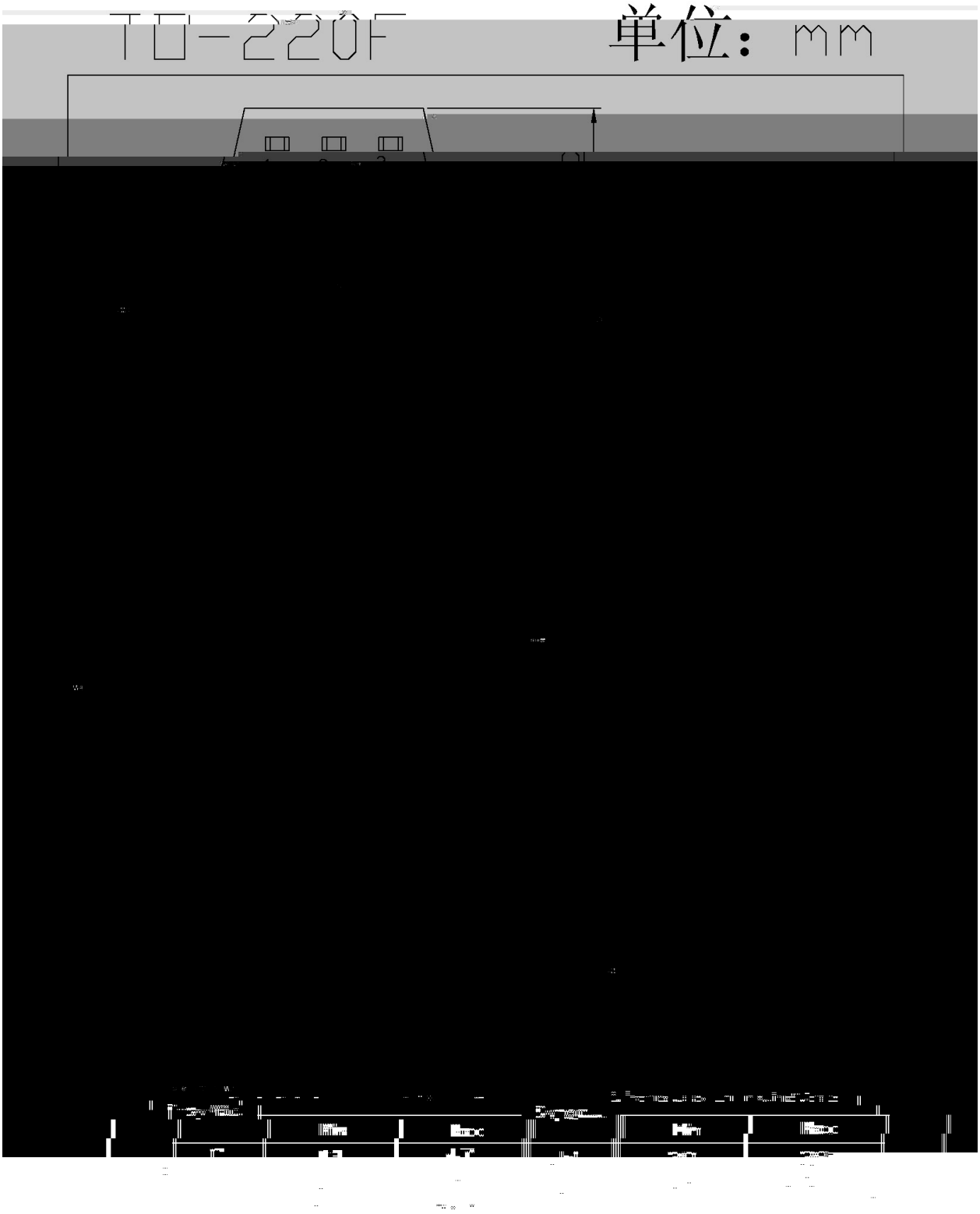
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	I_F=2A Tc=25		0.80		V
		I_F=2A Tc=125		0.66		V
		I_F=8A Tc=25		0.93	1.0	V
		I_F=8A Tc=125		0.82	0.9	V
Instantaneous Reverse Current	I_R Note 1	V_R=200V Ta=25			10	A
		V_R=200V Ta=125			150	A
Reverse Recovery Time	t_{rr}	I_R=1.0A I_{RR}=0.25A I_F=0.5A			35	ns

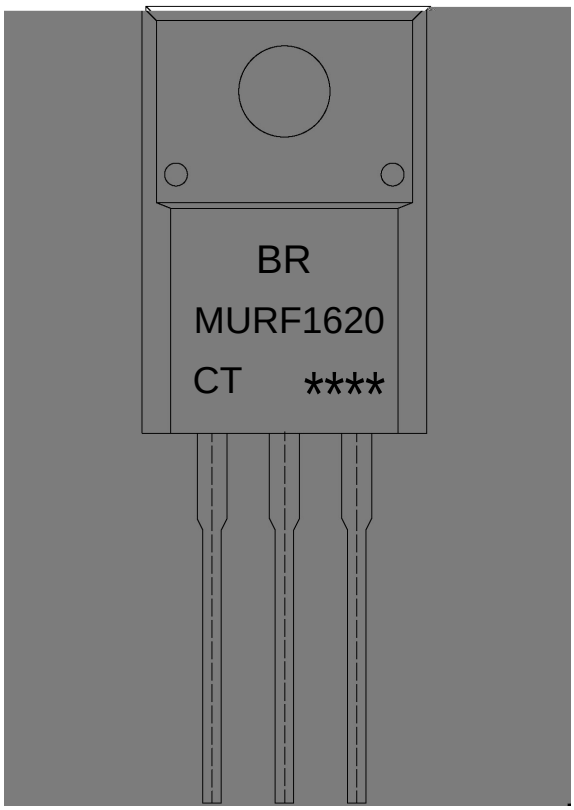
/Notes

1. /Short duration pulse test used to minimize self-heating effect.
2. / Unless otherwise noted, values for the parameters of a single chip

/ Package Dimensions



/ Marking Instructions



BR

MURF1620

CT:

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Note:

BR:	Company Code
MURF1620:	Product Type.
CT:	Internal Structure
****:	Lot No. Code, code change with Lot No.