

MURF1620CT

Rev.F Mar.-2016

/ Descriptions

TO-220F

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

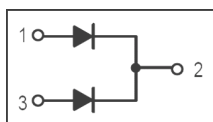
/ Features

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

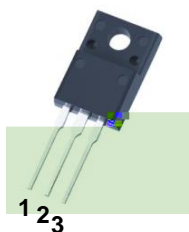
/ Applications

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	

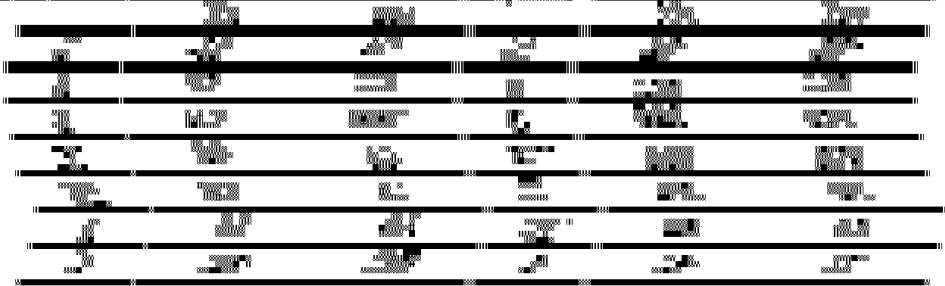
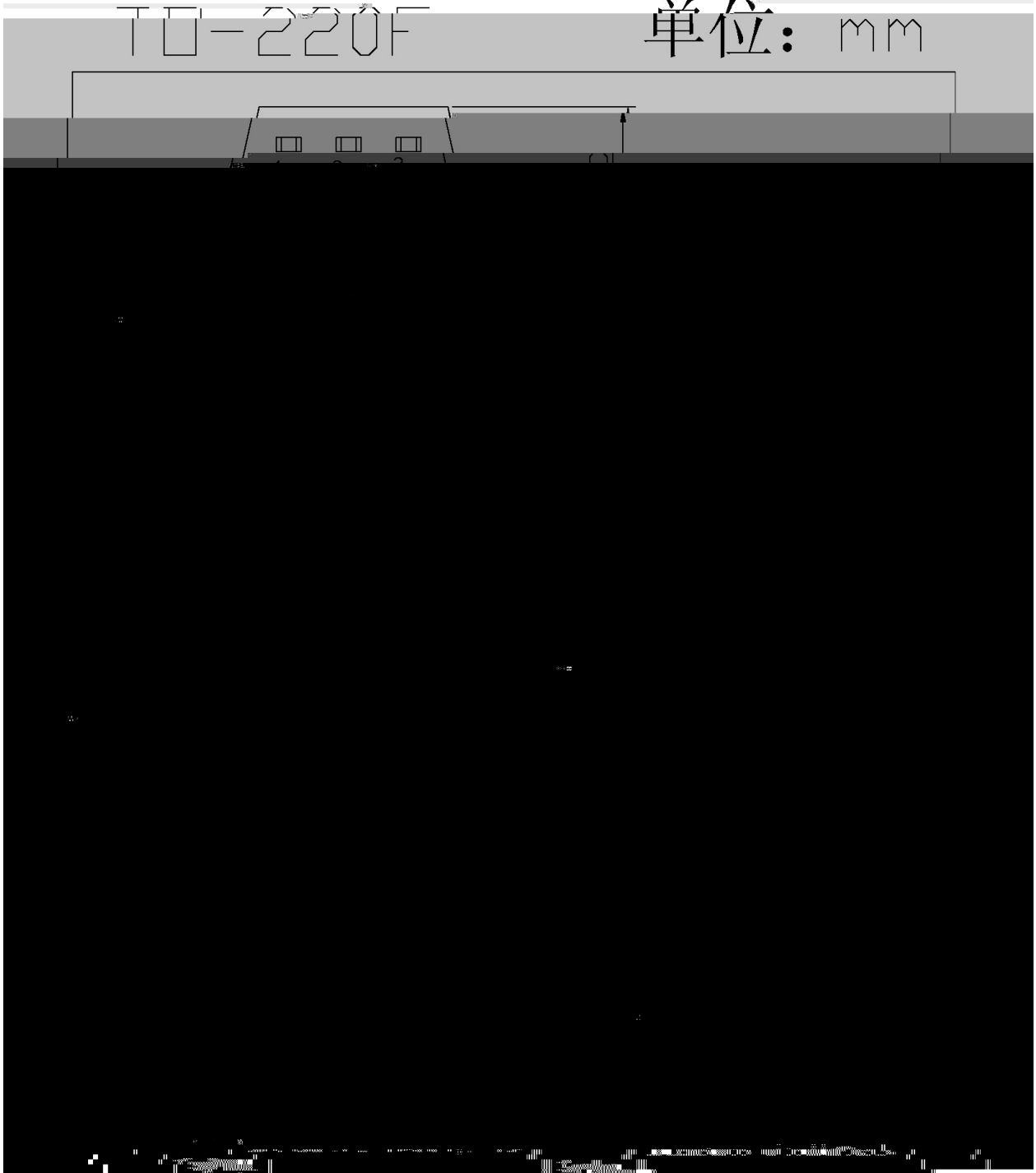
/ Electrical Characteristics(Ta=25)

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

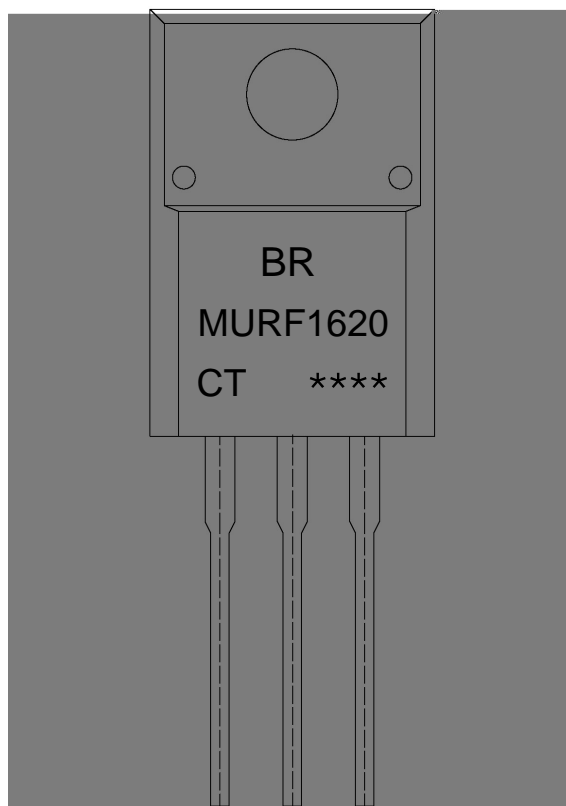
/Notes

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:

Note:

BR: Company Code

MURF1620: Product Type.

CT: Internal Structure

****: Lot No. Code, code change with Lot No.

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DATA SHEET