

/ Descriptions

TO-220F

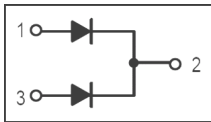
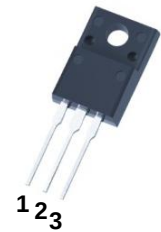
Ultrafast Recovery Diode in a TO-220F Plastic Package.

/ 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($T_a=25^\circ\text{C}$)

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	$R_{\theta JC}$	3.3	/W
Junction and Storage Temperature Range	$T_j \quad T_{stg}$	-55 150	

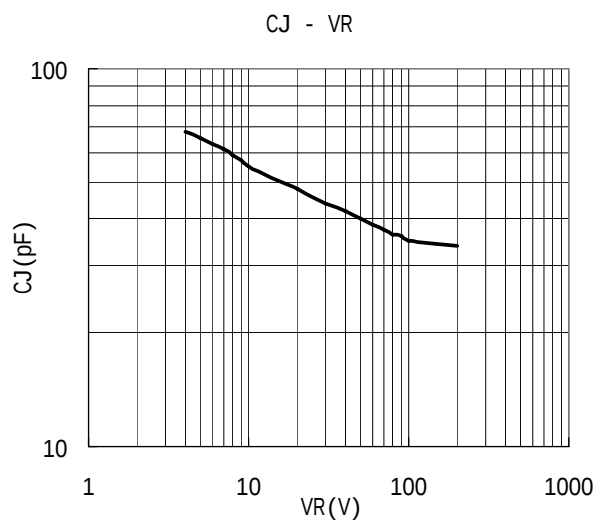
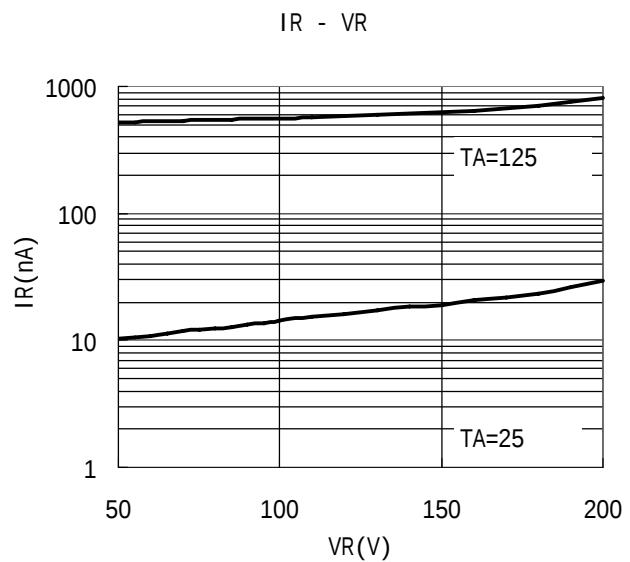
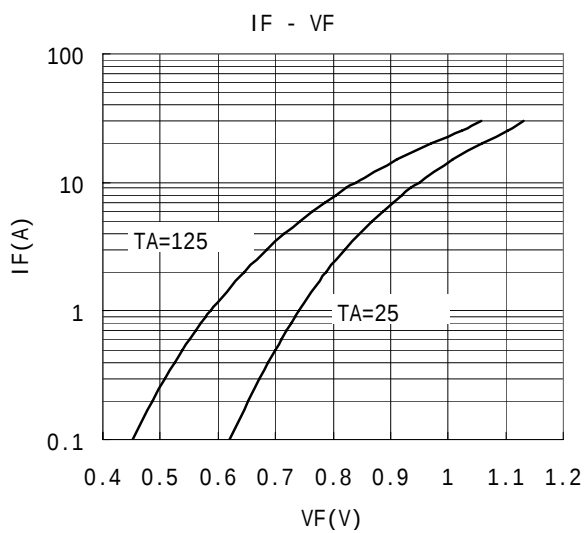
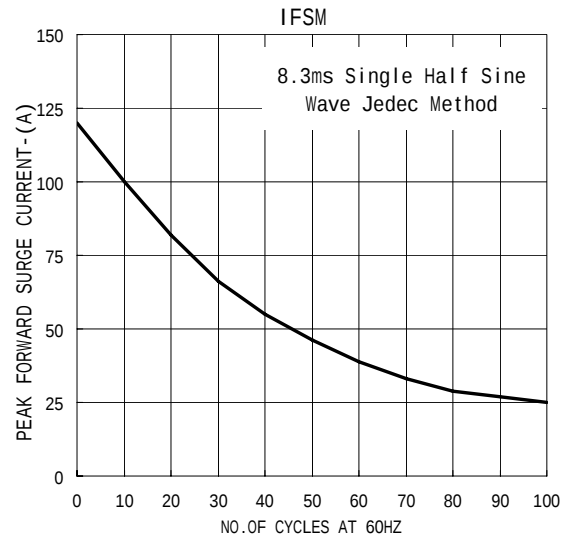
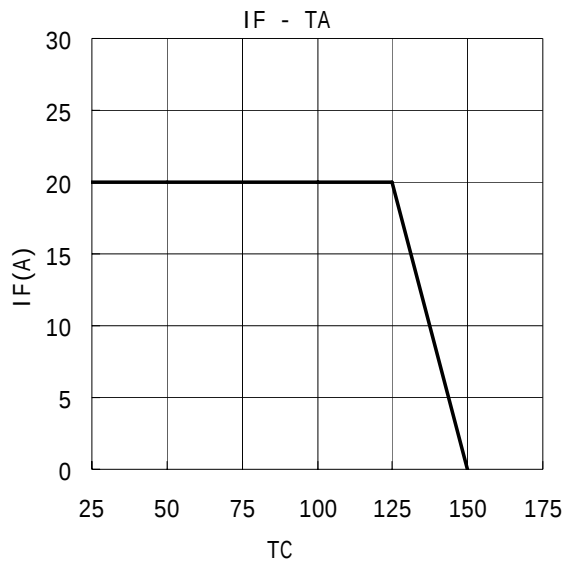
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

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

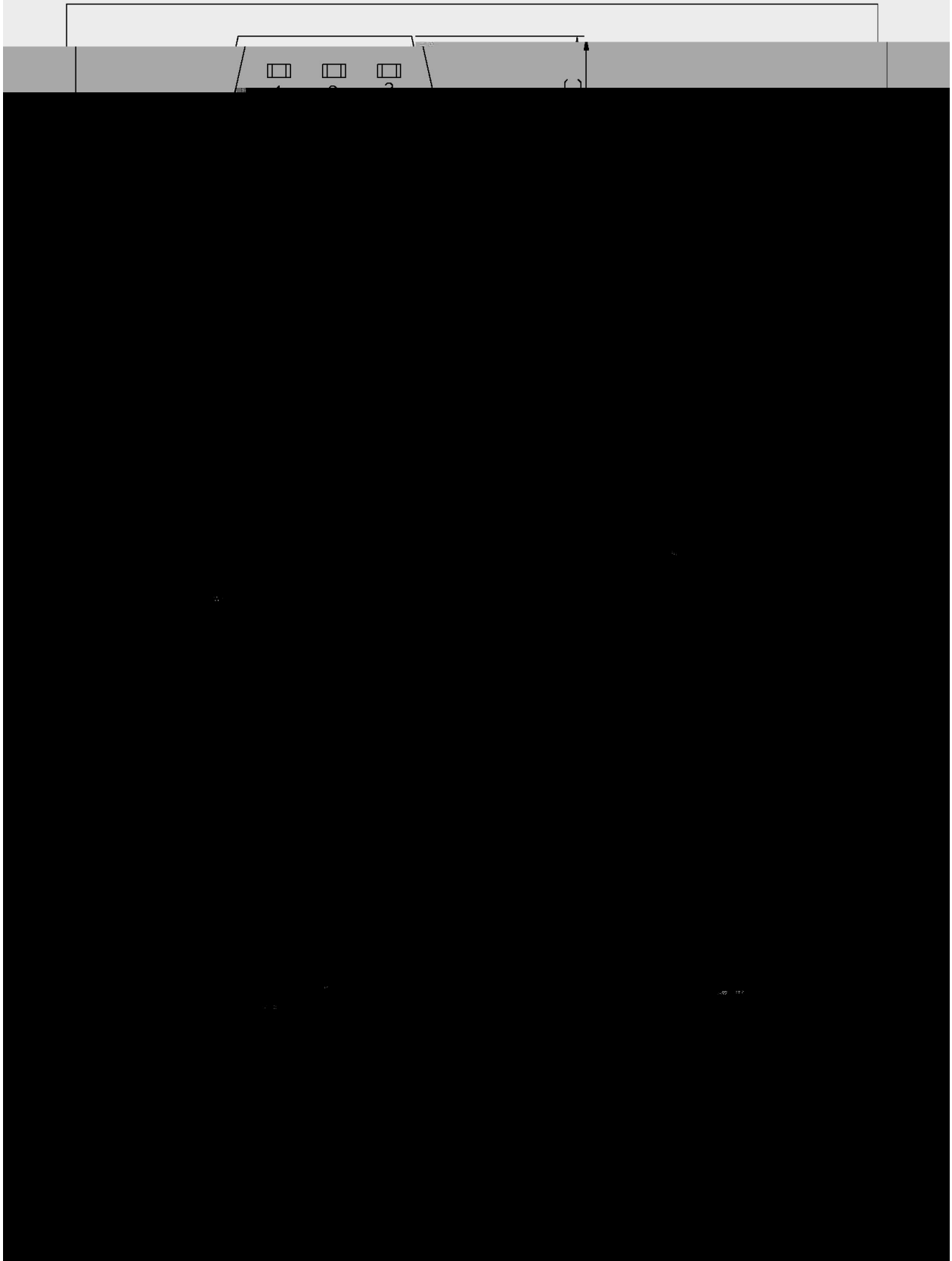
/ Electrical Characteristic Curve



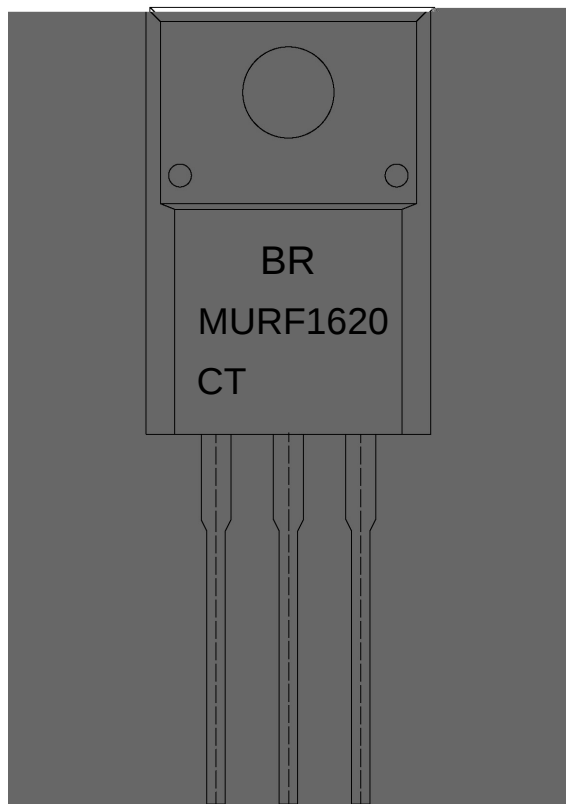
/ Package Dimensions

TO-220F

单位: mm



/ Marking Instructions



BR

MURF1620

CT:

Note:

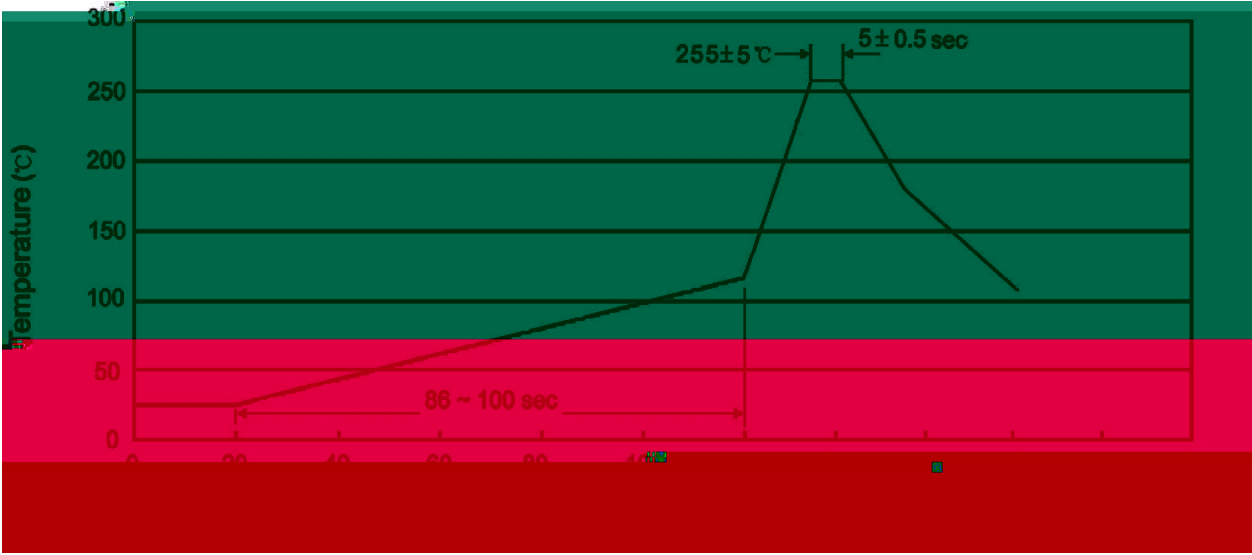
BR: Company Code

MURF1620: Product Type.

CT: Internal Structure

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

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- 1

25 150

60 90sec;
- 2

255±5

5±0.5sec;
- 3

2 10

/sec.
- 1.Preheating:25~150

, Time:60~90sec.
- 2.Peak Temp.:255±5

, Duration:5±0.5sec.
3. Cooling Speed: 2~10

/sec.

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type	Units					Dimension		(unit mm ³)