

# MURJ2020CT

Rev.E Mar.-2016

## / Descriptions

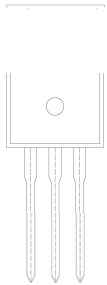
TO-220S

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

## / Features

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

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



PIN1 Anode

PIN 2 Cathode

PIN 3 Anode

PIN 4 NC

## / h<sub>FE</sub> Classifications & Marking

见 明 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 Rectified Forward Current	$I_F$	2 10	A
Non Repetitive Peak Surge Current	$I_{FSM}$	120	A
Thermal Resistance Junction to Case	$R_{Jc}$	2.9	/W
Storage Temperature Range	$T_j T_{stg}$	-55 150	

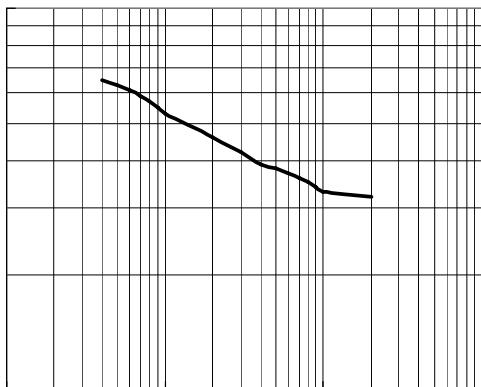
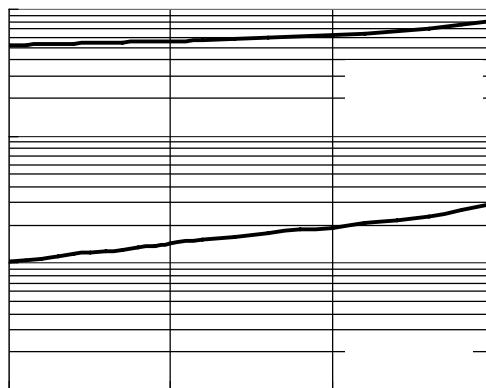
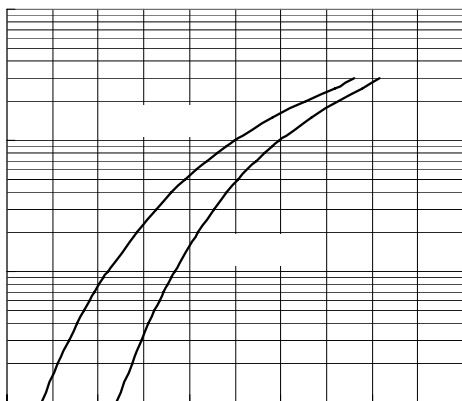
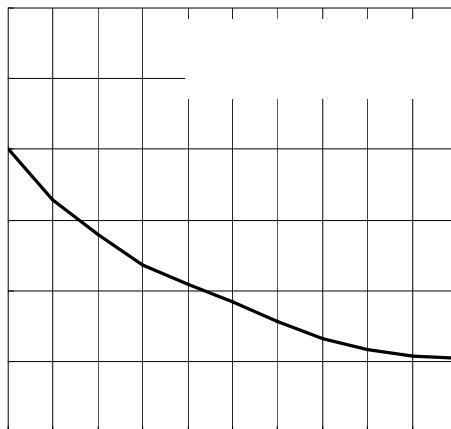
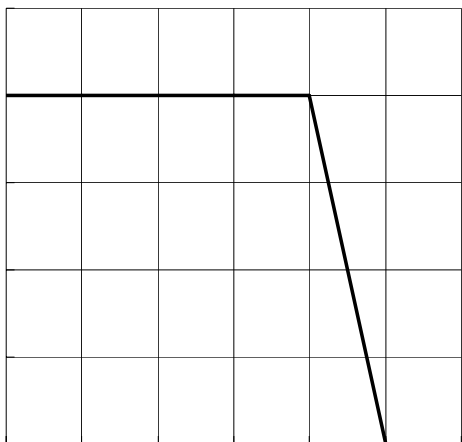
**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	小 Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F=2A$ $T_c=25$		0.79		V
		$I_F=2A$ $T_c=25$		0.65		V
		$I_F=10A$ $T_c=25$		0.95	1.0	V
		$I_F=10A$ $T_c=25$		0.84	0.9	V
Instantaneous Reverse Current	$I_R$ Note 1	$V_R=200V$ $T_a=25$			10	$\mu A$
		$V_R=200V$ $T_a=25$			150	$\mu A$
Reverse Recovery Time	$t_{rr}$	$I_R=1.0A$ $I_F=0.5A$	$I_{RR}=0.25A$		35	ns

Notes

effect. / Unit: unless otherwise noted, values for the parameters of a single chip

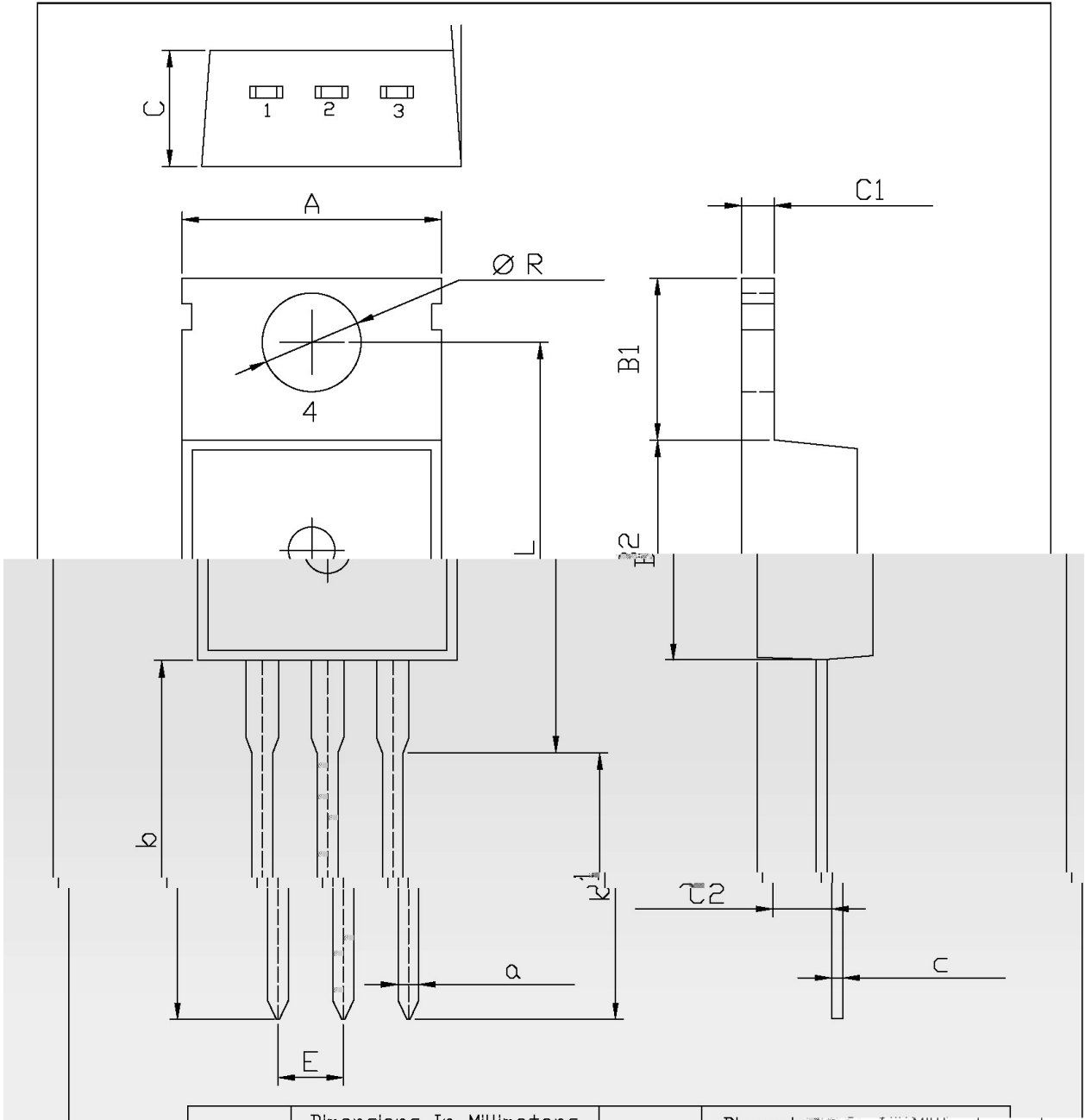
/ Electrical Characteristic Curve



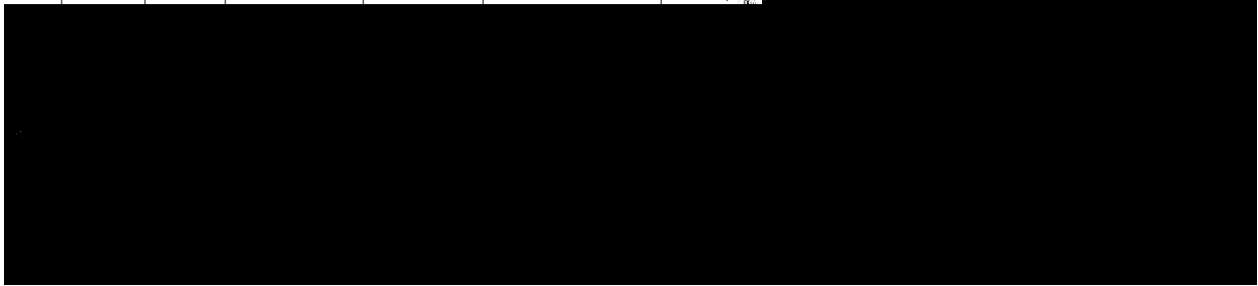
/ Package Dimensions

TO-220S

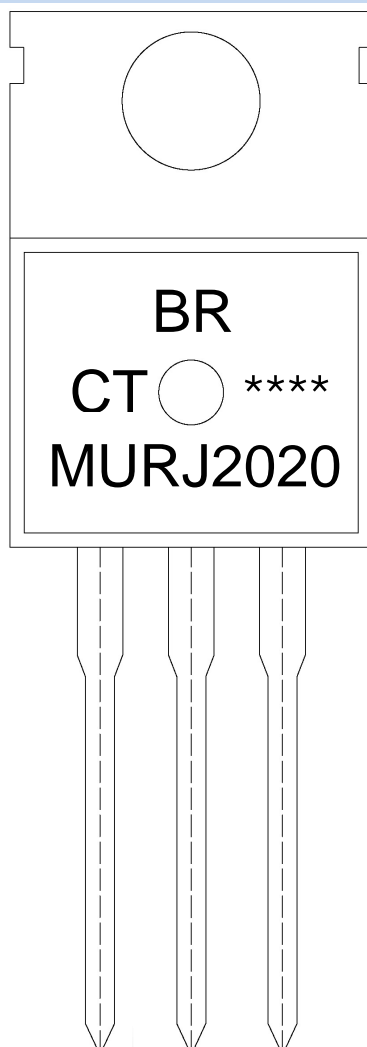
Unit: mm



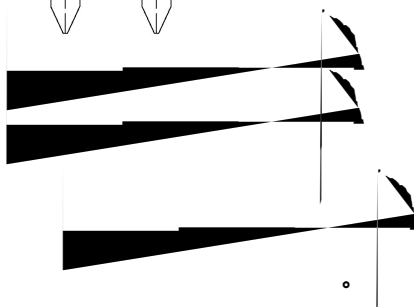
Dimensions in Millimeters			Dimensions in Millimeters		
Symbol	Min	Max	Symbol	Min	Max



/ Marking Instructions



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Note:

BR:

Company Code

MURJ2020

Product Type.

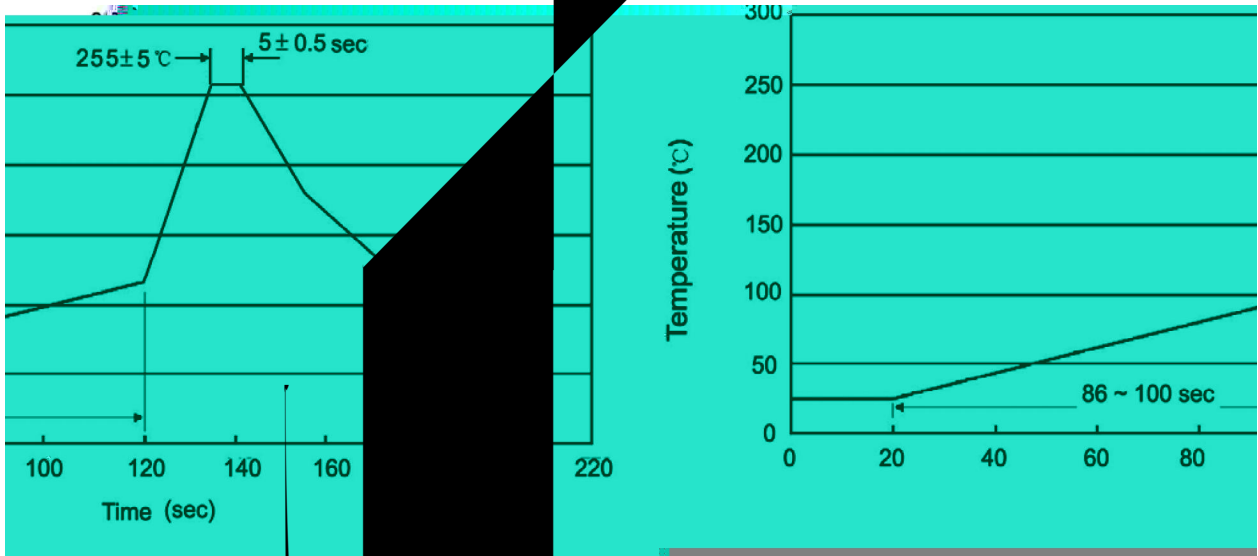
CT:

Internal Structure

\*\*\*\*:

Lot No. Code, code change with Lot No.

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



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Note:

- 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

10±1 sec.

Temp.:270±5

Time:10±1 sec

g SPEC.

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Tube	Units/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-220S	50	20	1000	5	5000	532×31.4×5.5	555×164×50	575×290×180

/ Notices