

MURJ1660CT

Rev.E Mar.-2016

/ Descriptions

TO-220S

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

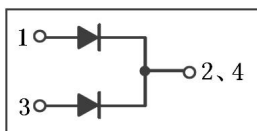
/ Features

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

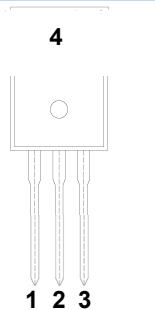
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Anode

PIN 2 Cathode

PIN 3 Anode

PIN 4 NC

/ h_{FE} Classifications & Marking

See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
RMS Voltage	V_{RMS}	420	V
DC Blocking Voltage	V_{DC}	600	V
Average Forward Current	I_F	2x8	A
Non Repetitive Peak Surge Current	I_{FSM}	125	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	3.0	°C/W
Storage Temperature Range	$T_j T_{stg}$	-55 150	°C

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=8A(T_C=25)$			1.8	V
		$I_F=8A(T_C=150)$		1.05	1.3	V
		$I_F=16A(T_C=125)$			2.0	V
		$I_F=16A(T_C=150)$		1.28	1.6	V
Instantaneous Reverse Current	I_R	$V_R=600V(T_a=25)$			5	μA
		$V_R=600V(T_a=150)$		16	100	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{RR}=0.25A$			50	ns

/Notes

effect.

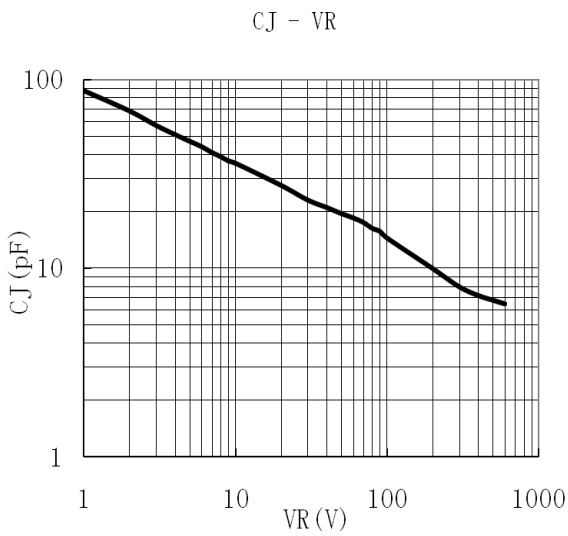
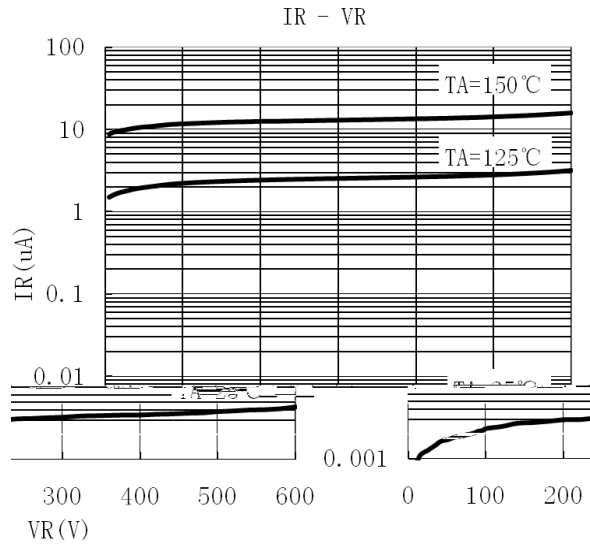
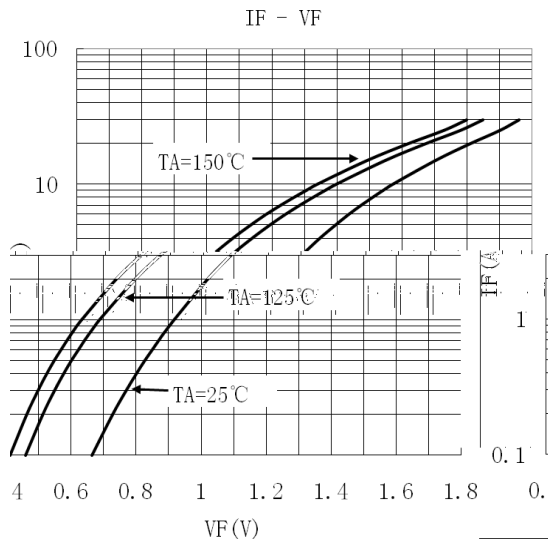
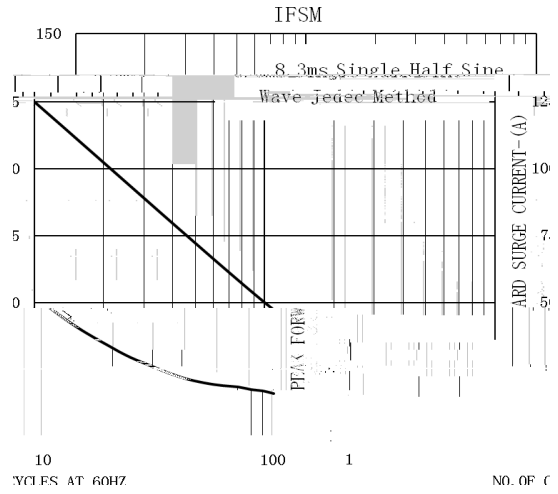
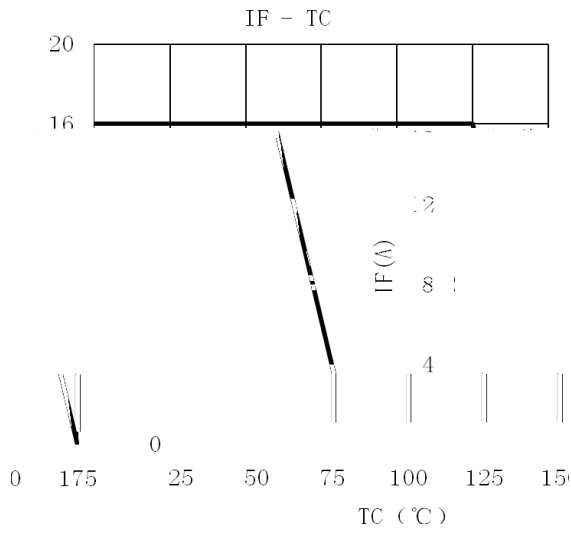
2.

single chip

/Short duration pulse test used to minimize self-heating

/ Unless otherwise noted, values for the parameters of a

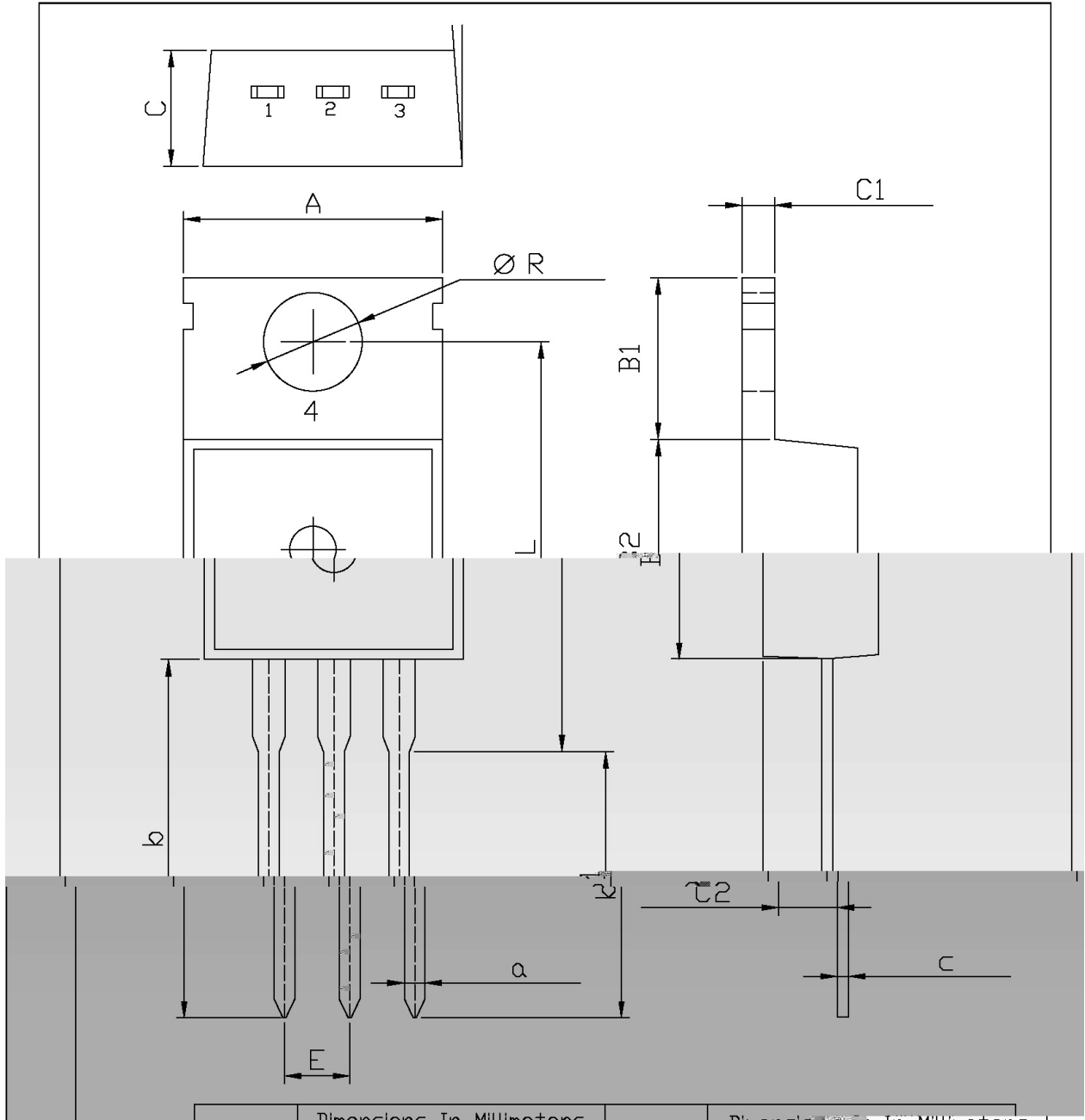
/ Electrical Characteristic Curve



/ Package Dimensions

TO-220S

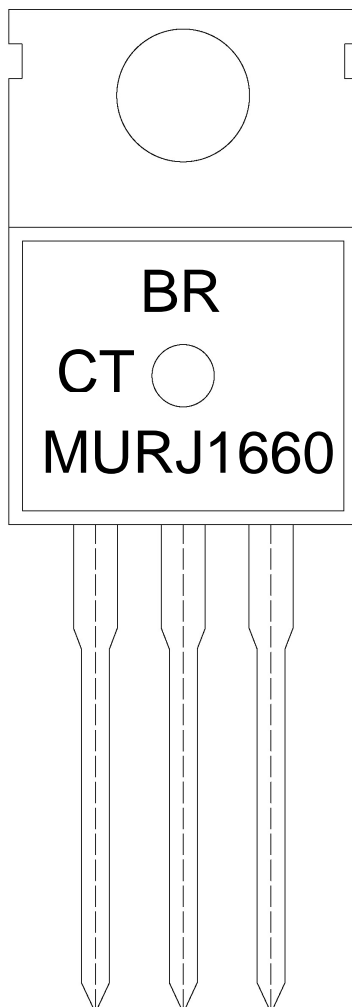
Unit: mm



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

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/ Marking Instructions



Note:

BR:

Company Code

MURJ1660

Product Type.

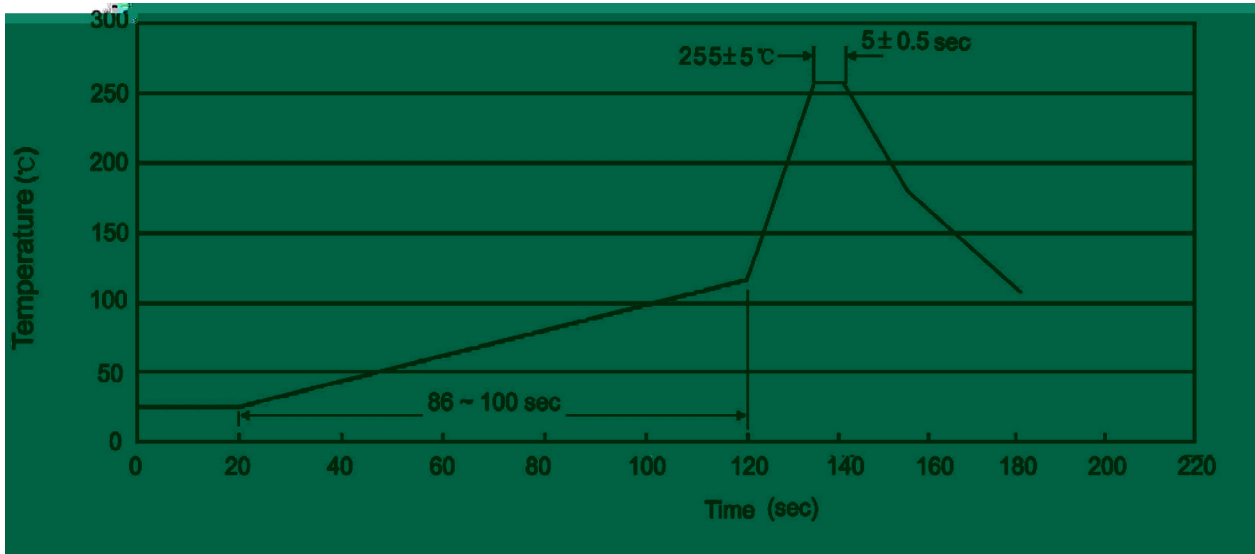
CT:

Internal Structure

***:

Lot No. Code, code change with Lot No.

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



Note:

- | | | | | | |
|---|-----|-----|----|----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱

/ Notices