

# MURJ1620CT

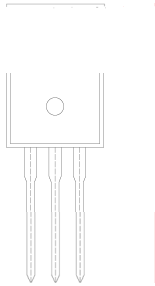
Rev.E Mar.-2016

TO-220S

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

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

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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	$I_F$	2x8	A
Non Repetitive Peak Surge Current	$I_{FSM}$	120	A
Thermal Resistance Junction to Case	$R_{JC}$	2.9	/W
Junction Temperature Range	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

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	V
		$I_F=8A$ $T_c=125$		0.82	0.9	V

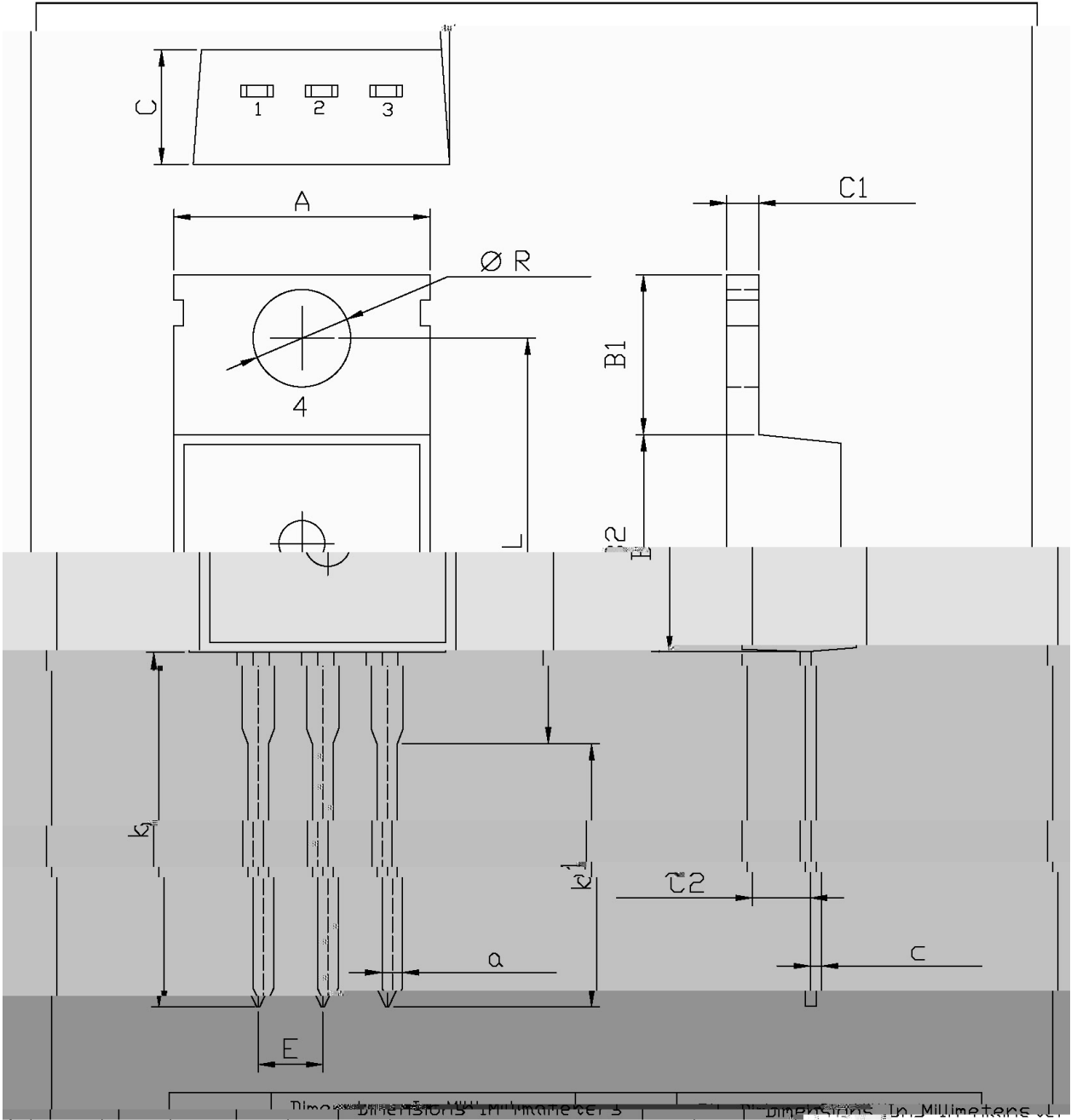
Instantaneous Reverse Current     $I_R$   
Note 1

**MURJ1620CT**  
Rev.E Mar.-2016

/ Package Dimensions

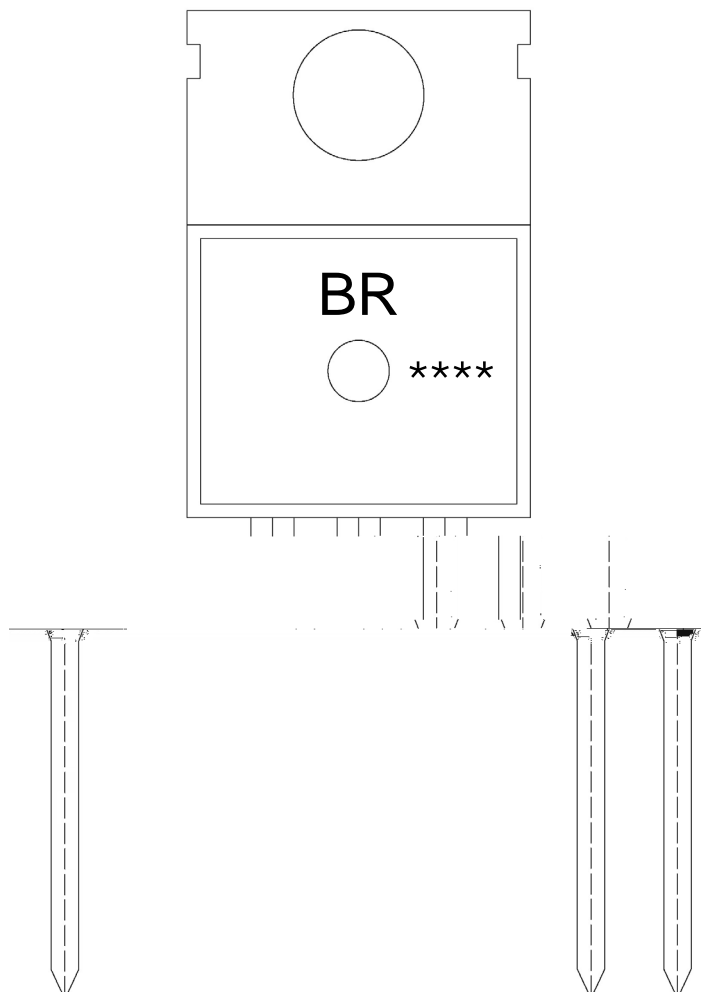
TO-220S

Unit: mm



Dimensions in Millimeters		Dimensions in Millimeters			
Symbol	Min.	Max.	Symbol	Min.	Max.
A	10.0	12.0	C	10.0	12.0
B1	10.0	12.0	C1	10.0	12.0
B2	10.0	12.0	C2	10.0	12.0
C	10.0	12.0	E	10.0	12.0
C1	10.0	12.0	k	10.0	12.0
C2	10.0	12.0	k1	10.0	12.0
E	10.0	12.0	a	10.0	12.0
k	10.0	12.0	L	10.0	12.0
k1	10.0	12.0	ØR	10.0	12.0
a	10.0	12.0	1	10.0	12.0
L	10.0	12.0	2	10.0	12.0
ØR	10.0	12.0	3	10.0	12.0
1	10.0	12.0	4	10.0	12.0
2	10.0	12.0			
3	10.0	12.0			
4	10.0	12.0			

/ Marking Instructions



BR

MURJ1620

CT:

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Note:

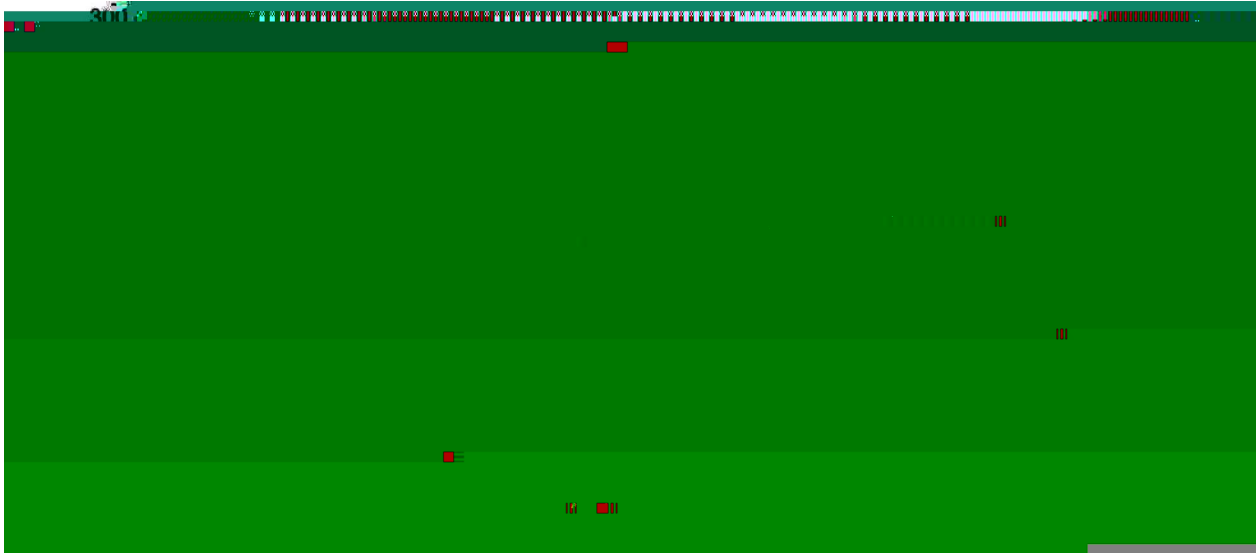
BR: Company Code

MURJ1620 Product Type.

CT: Internal Structure

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

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



- |   |       |     |           |        |                                         |                                      |
|---|-------|-----|-----------|--------|-----------------------------------------|--------------------------------------|
| 1 | 25    | 150 | 60        | 90sec; | Note:                                   | 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                      Time:10±1 sec

**/ Packaging SPEC.**

/ TUBE

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Tube /	Tubes/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**