

/ Descriptions

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

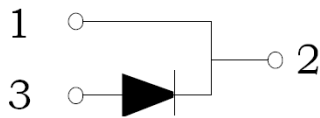
/ Features

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

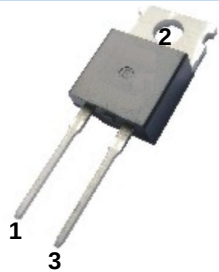
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 2 Cathode

PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

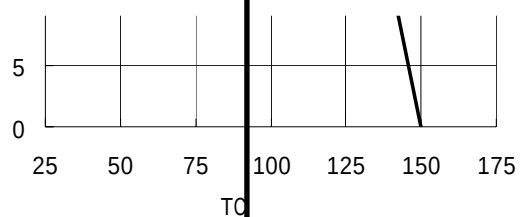
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
RMS Voltage	V_{RMS}	420	V
DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Current	I_F	1 × 30	A
Peak forward surge current	I_{FSM}	300	A
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	2.8	/W
Junction Temperature Range	T_J	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

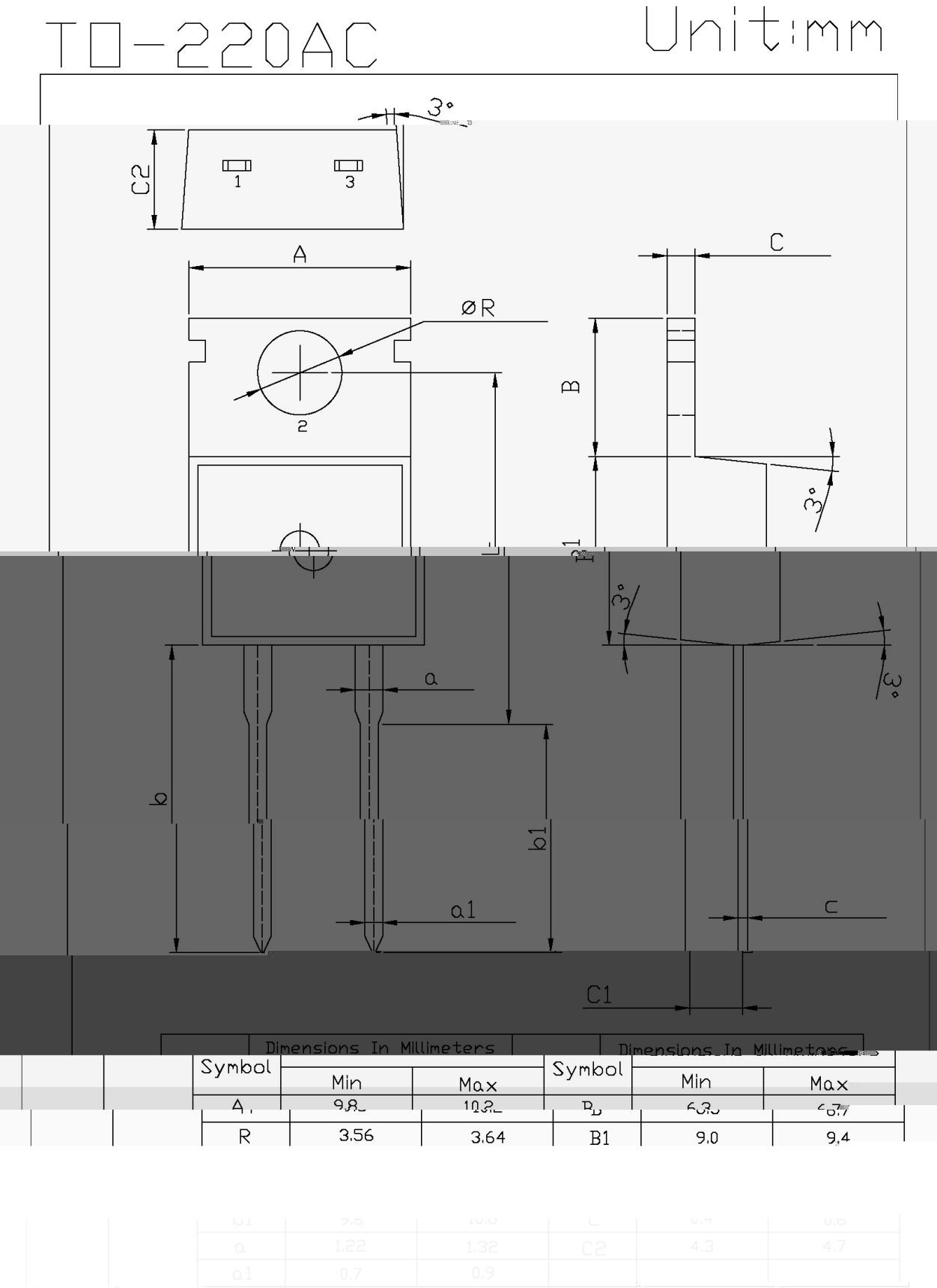
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=5.0A$ $T_C=25$			1.35	V
		$I_F=5.0A$ $T_C=150$			1.15	
		$I_F=30A$ $T_C=25$			1.65	
		$I_F=30A$ $T_C=150$			1.25	
Instantaneous Reverse Current Note1	I_R	$V_R=600V$ $T_a=25$			0.25	mA
		$V_R=420V$ $T_a=150$			1	
		$V_R=600V$ $T_a=150$			2	
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{RR}=0.25A$			50	ns

Notes

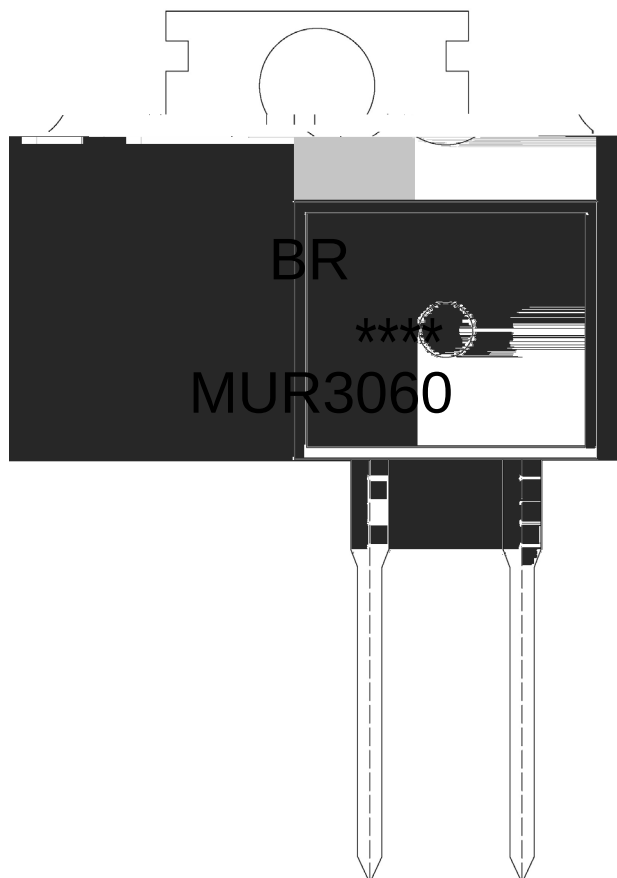
- Short duration pulse test used to minimize self-heating effect.
- Unless otherwise noted, values for the parameters of a single chip



/ Package Dimensions



/ Marking Instructions



Note:

BR:

Company Code

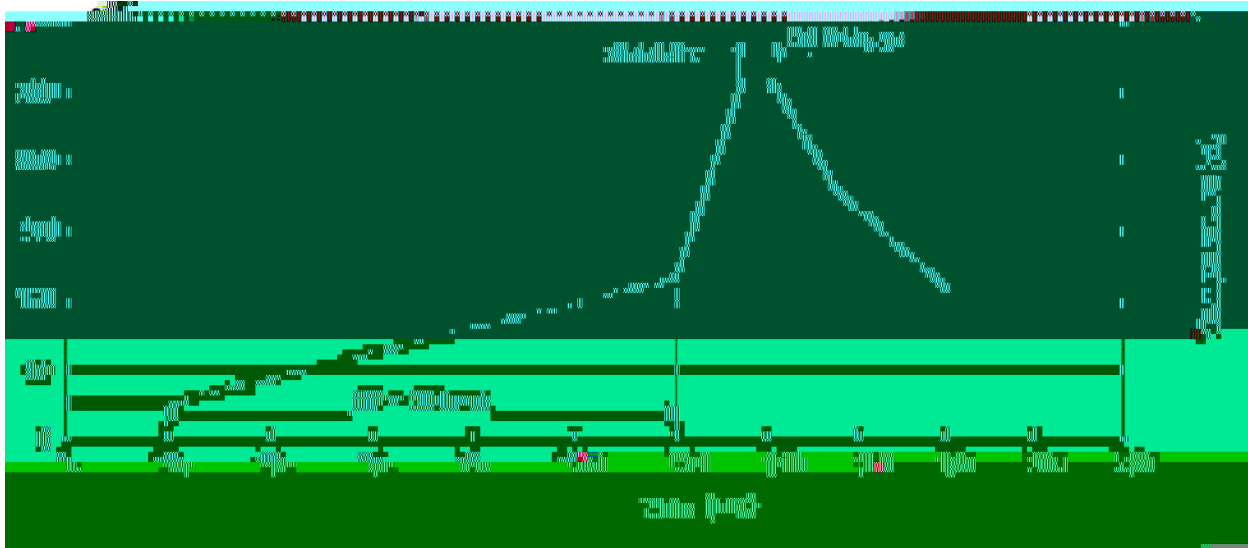
MUR3060

Product Type.

****:

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 Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F/AC	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F/AC	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices