

/ Descriptions

TO-220AC

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

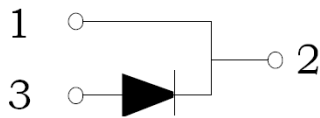
/ Features

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

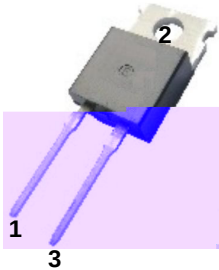
/ Applications

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	

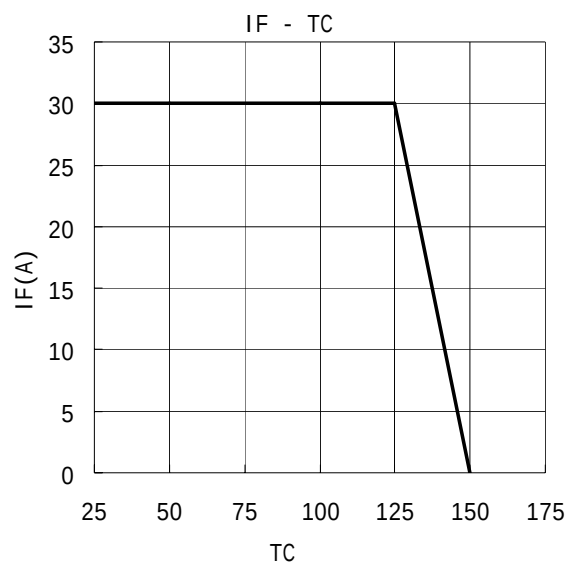
/ Electrical Characteristics(Ta=25)

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 <small>Note1</small>	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

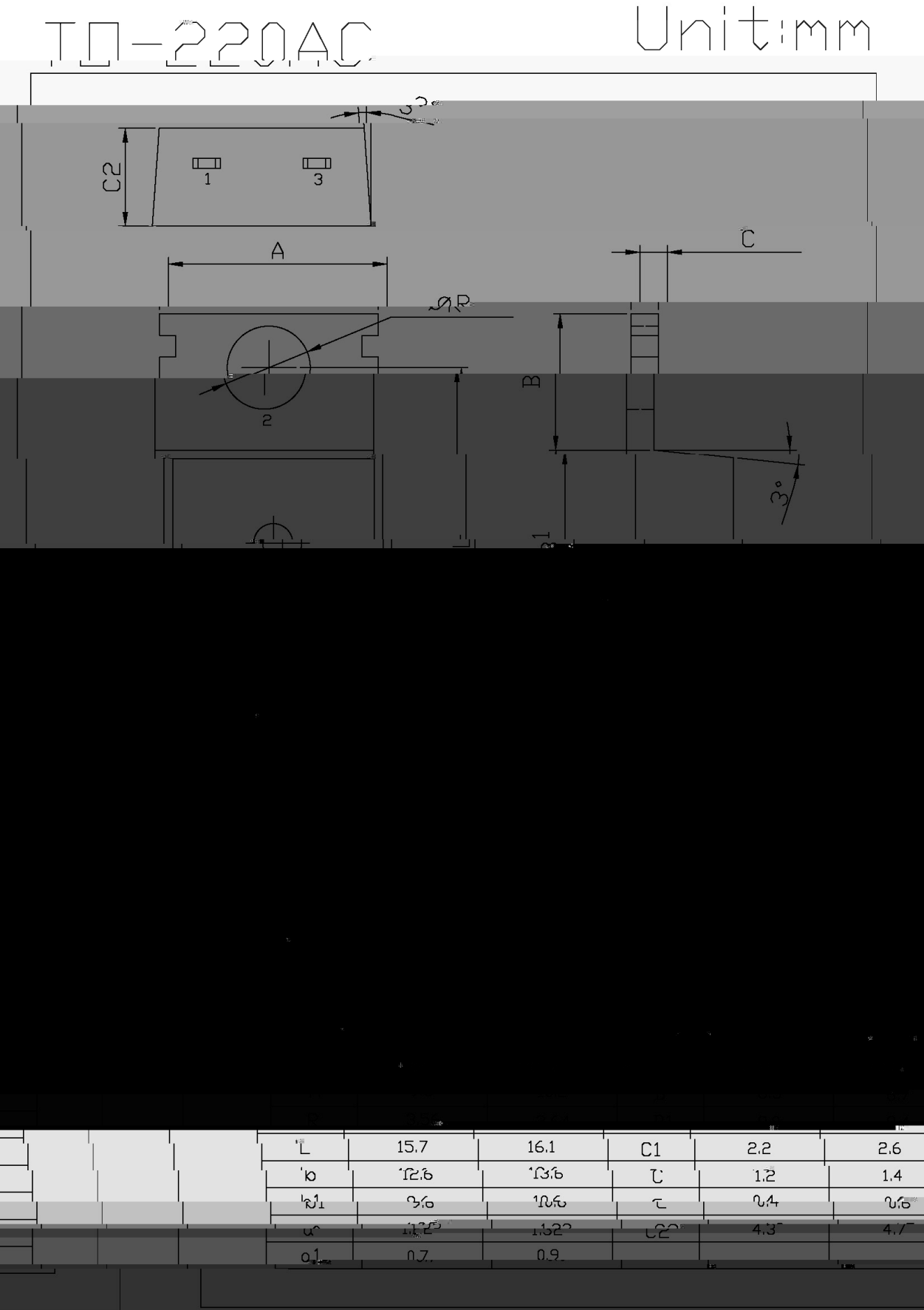
/Notes

1. / Short duration pulse test used to minimize self-heating effect.
2. / Un5gss otherwise noted, values for the parameters of a single chip

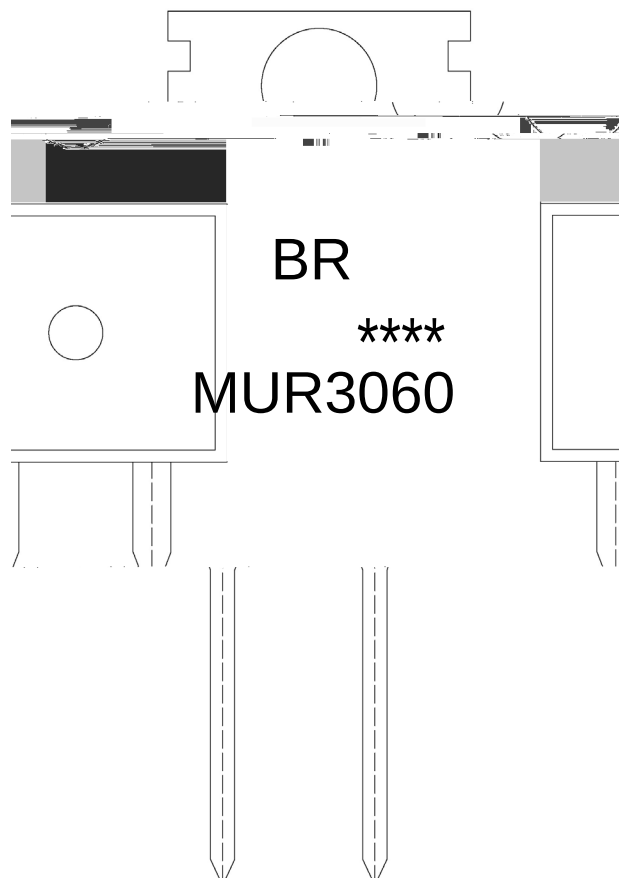
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

MUR3060

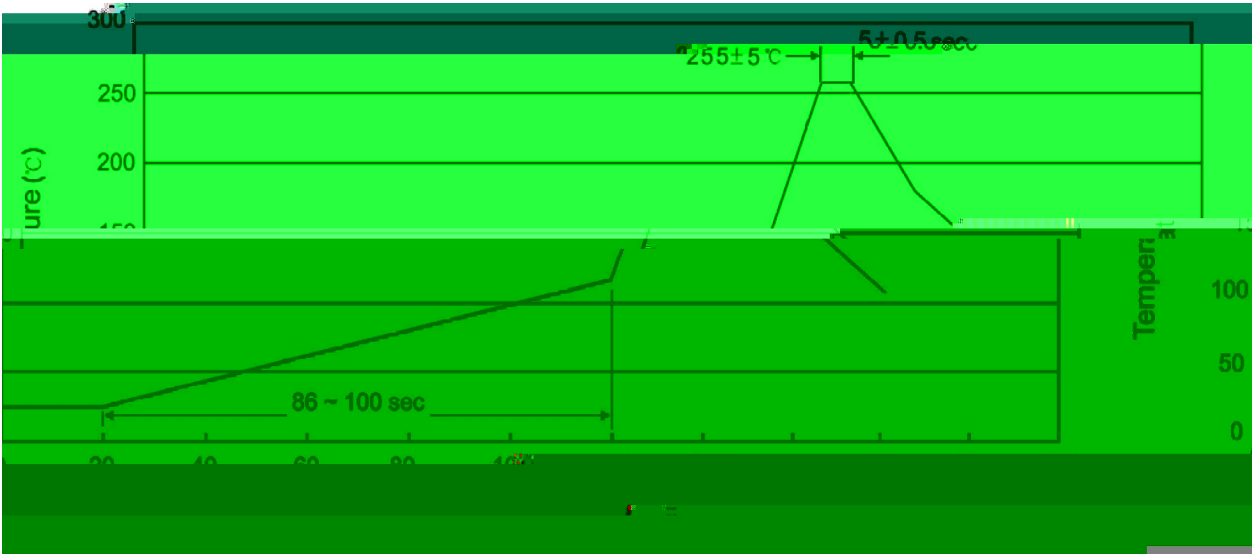
Note:

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;
- 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)
	Units/Bag	Bags/Inner Box	Units/Inner Box	
	/	/	/	