

WR0553 M M ồ Ồ ư ư ॥ 1

Ultrafast Recovery Diode in a TO-220 Plastic Package.

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

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



PIN1 Anode PIN 2 Cathode PIN 3 Anode

/ h_{FE} Classifications & Marking

M 7 " See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
RMS Reverse Voltage	V_{RMS}	140	V
DC Blocking Voltage	V_{DC}	200	V
Average Forward Current	I_F	2×6	A
Non Repetitive Peak Surge Current	I_{FSM}	100	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	2.8	/W
Operating and Storage Temperature Range	T_j T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

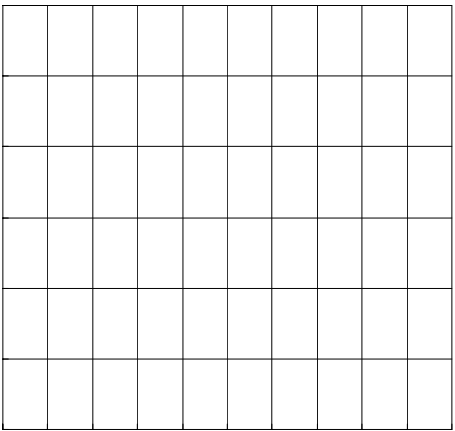
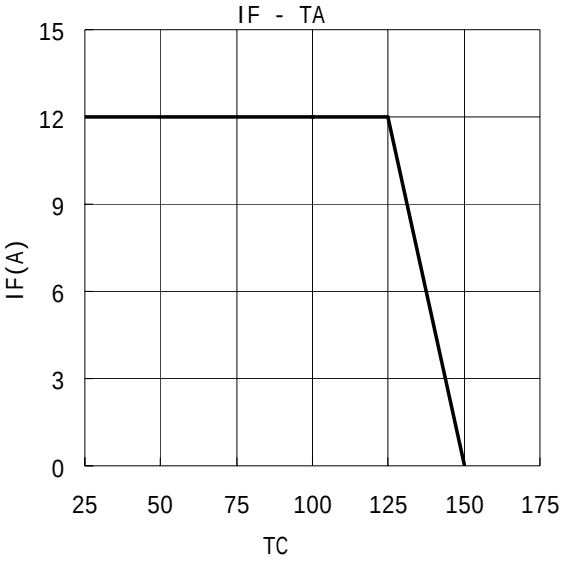
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=2A$ $T_c=25$		0.82		V
		$I_F=2A$ $T_c=125$		0.68		V
		$I_F=6A$ $T_c=25$		0.92	1.0	V
		$I_F=6A$ $T_c=125$		0.82	0.9	V
Instantaneous Reverse Current	I_R Note 1	$V_R=200V$ $T_a=25$			10	μA
		$V_R=200V$ $T_a=125$			150	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{RR}=0.25A$			35	ns

/Notes

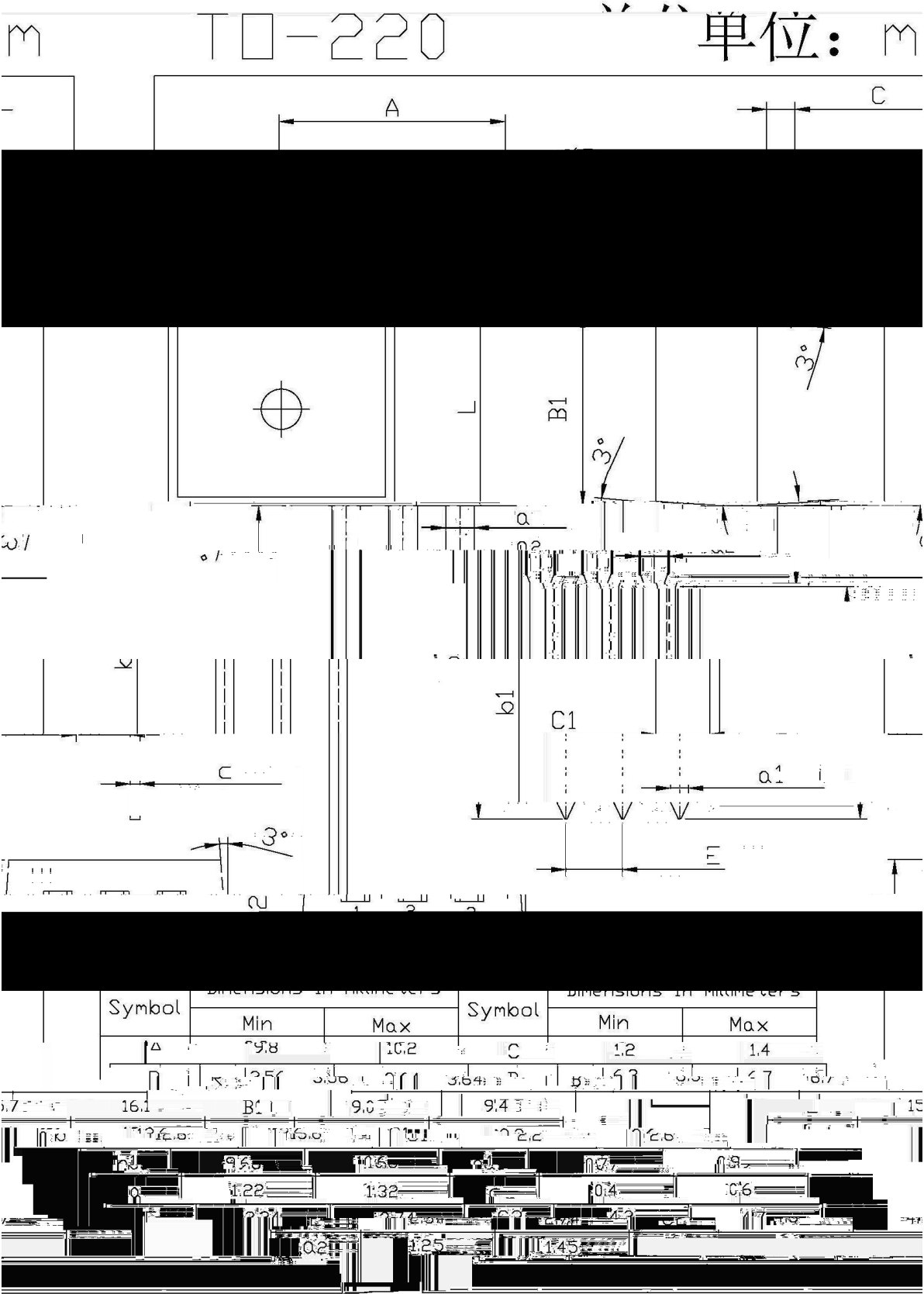
4. $\Delta T \sim 100^\circ C$ / Short duration pulse test used to minimize self-heating effect.

2. Unless otherwise noted, values for the parameters of a single chip

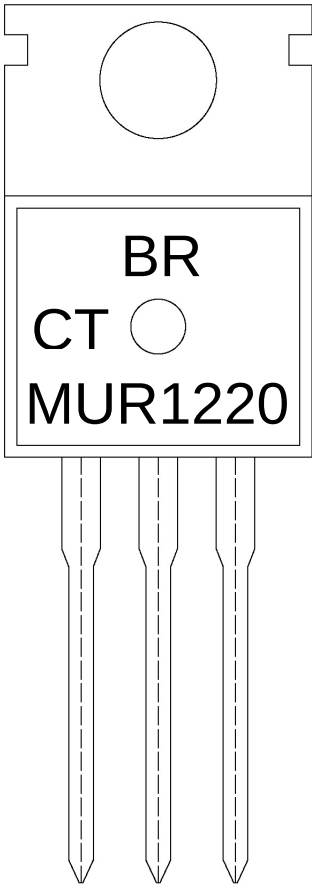
/ Electrical Characteristic Curve



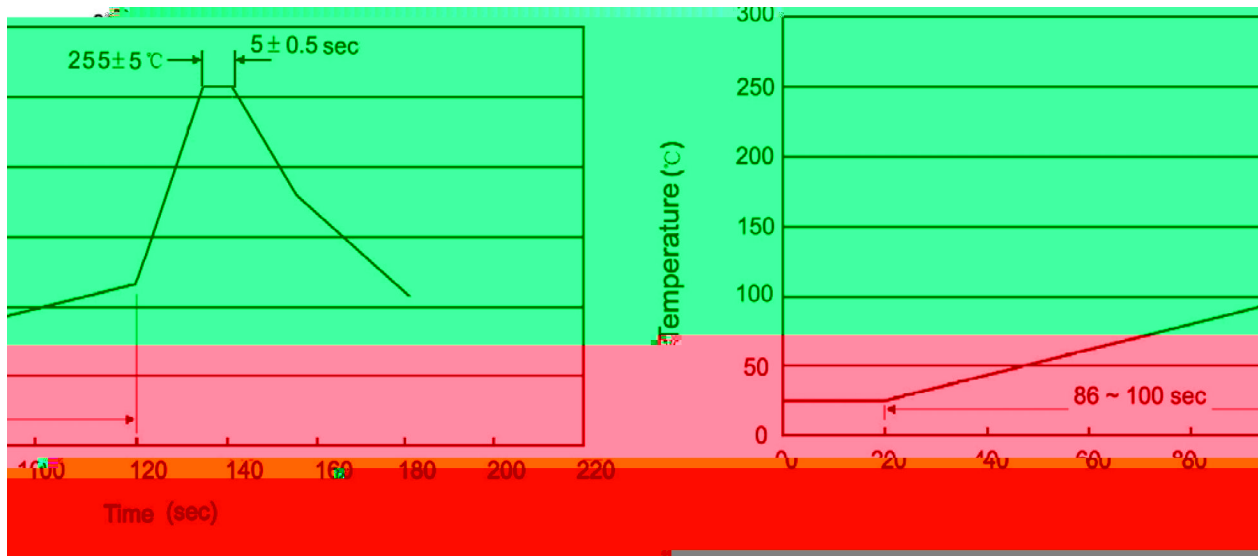
/ Package Dimensions



/ Marking Instructions



” Χ	
EU Χ	ꣳ 3 ʹ Γᄁ
P XU4553 Χ	ꣳ F β 3 N
FW:	ꣳ ʹ J =
---- Χ	ꣳ 1 F ḡ N Γᄁ 1 1 F ḡ N ψ ρ
Note:	
BR:	Company Code
MUR1220 Χ	Product Type.
CT:	Internal Structure
***:	Lot No. Code, code change with Lot No.


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


” X

1. 25~150 °C, Time: 60~90sec;
2. 255±5 °C, Duration: 5±0.5sec;
3. Cooling Speed: 2~10 °C/sec.

Note:

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

/ Resistance to Soldering Heat Test Conditions

□ 270±5 °C, Time: 10±1 sec.

Temp.: 270±5

Time: 10±1 sec

/ Packaging SPEC.

” Q T Y / BULK

Package Type	Units					Dimension (unit mm ³)		

” 1 Y / TUBE

Package Type	Units					Dimension (unit mm ³)		

/ Notices