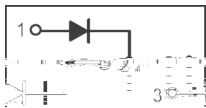


WO0553

Ultrafast Recovery Diode in a TO-220 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

See Marking Instructions

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 Forward Current	I_F	2 8	A
Non Repetitive Peak Surge Current	I_{FSM}	120	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	2.8	/W
Operating and Storage Temperature Range	T_j 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	1.0	V
		$I_F=8A$ $T_c=125$		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

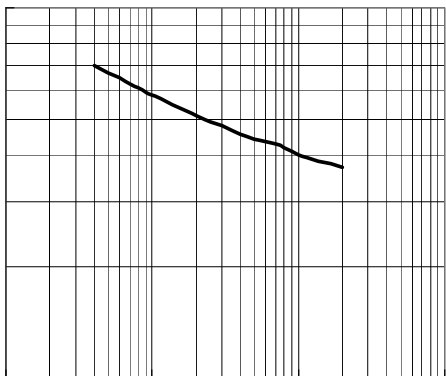
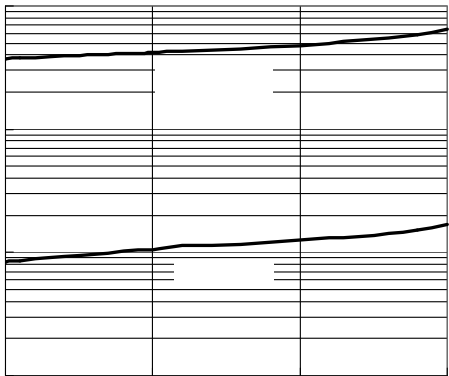
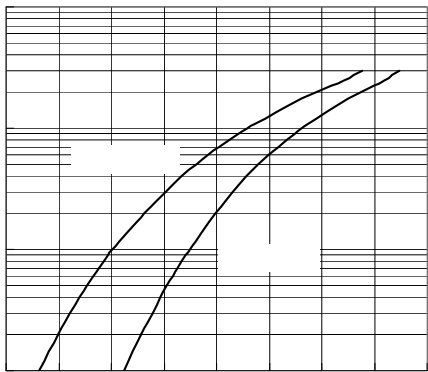
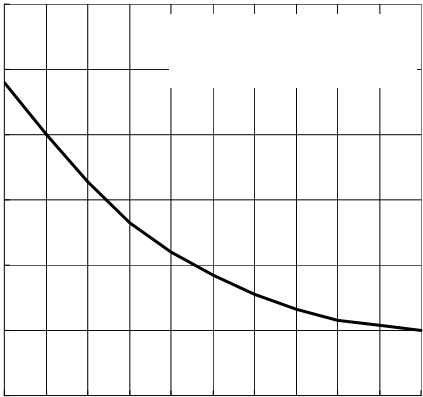
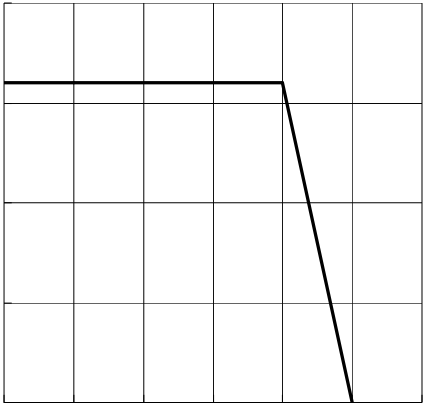
/Notes

41
effect.

/Short duration pulse test used to minimize self-heating

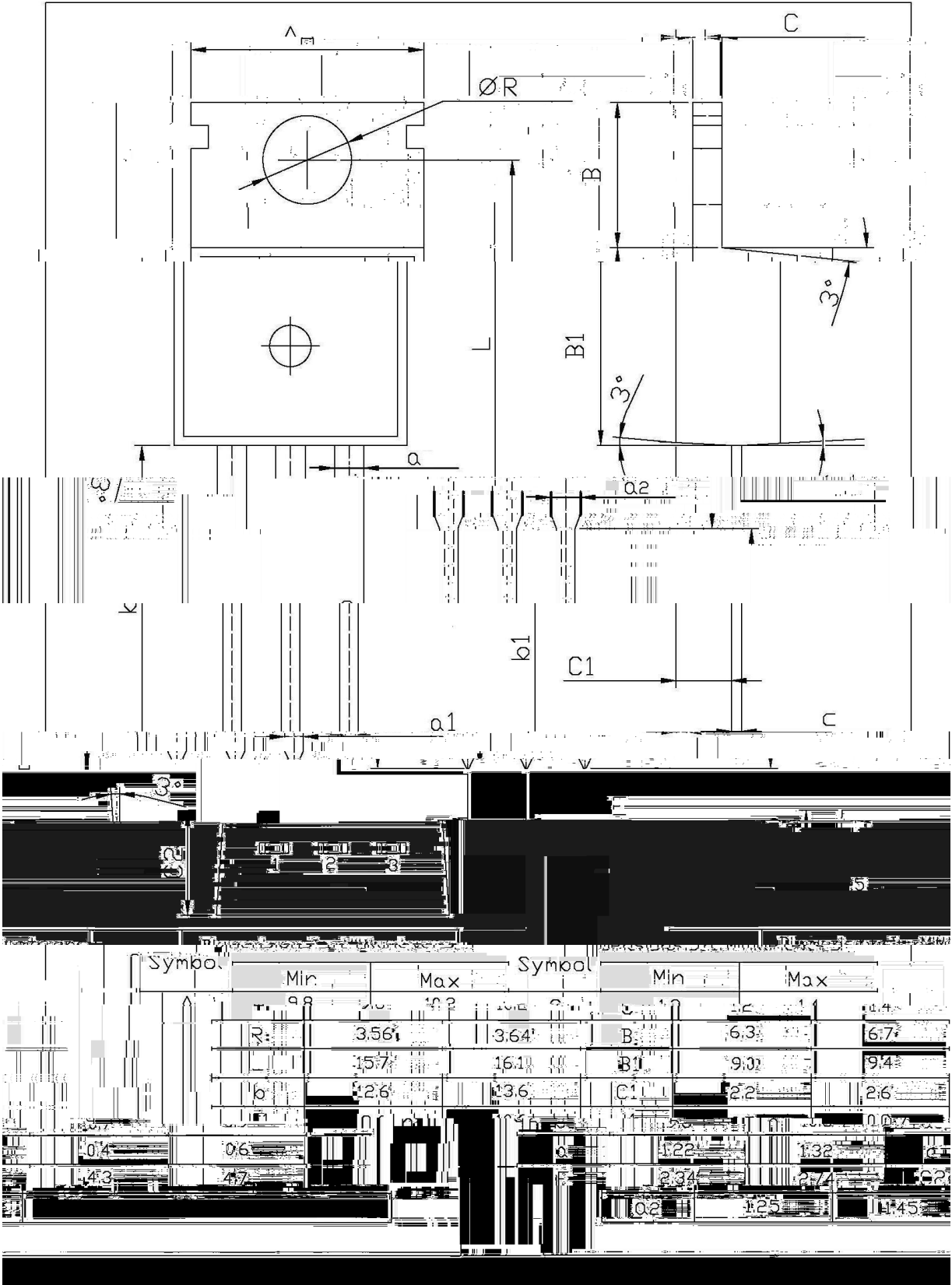
2.
single chip

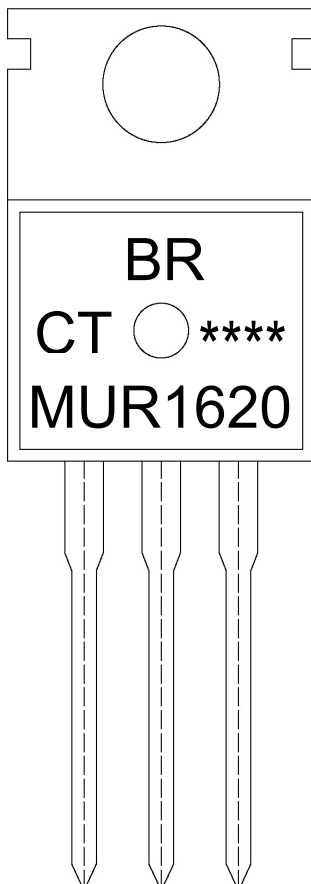
/ Unless otherwise noted, values for the parameters of a



T□-220

单位: mm





BR

MXR4653

CW:

Note:

BR:

Company Code

MXR4653

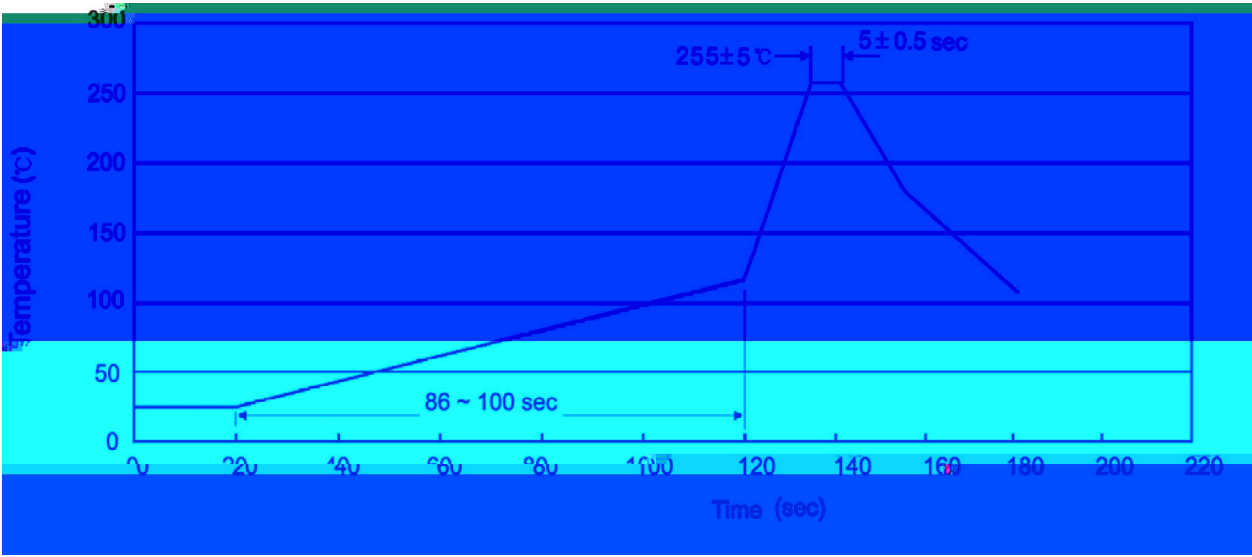
Product Type.

CW:

Internal Structure

****.

Lot No. Code, code change with Lot No.



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.

270±5

10±1 sec.

Temp.:270±5

Time:10±1 sec

/ 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	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	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180