

MUR1220CT

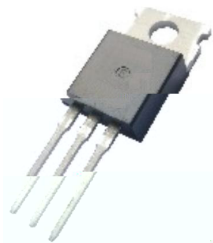
Rev.H Oct.-2018

WR0553

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

/ h_{FE} Classifications & Marking

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

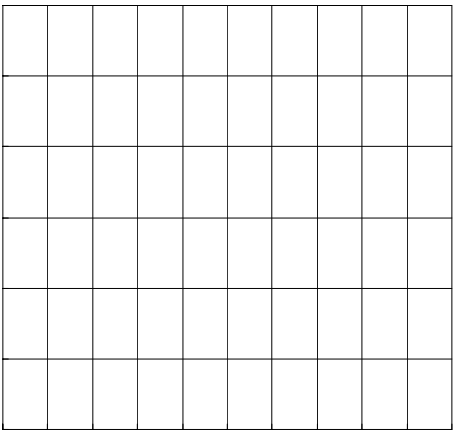
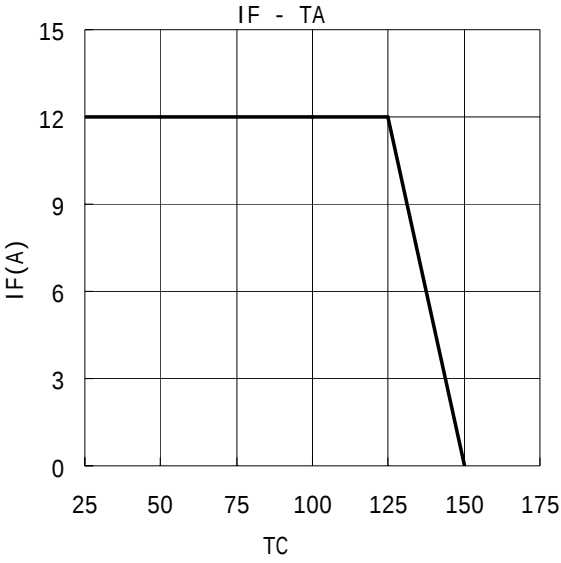
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effect.

/Short duration pulse test used to minimize self-heating

2.
single chip

/ Unless otherwise noted, values for the parameters of a

/ Electrical Characteristic Curve



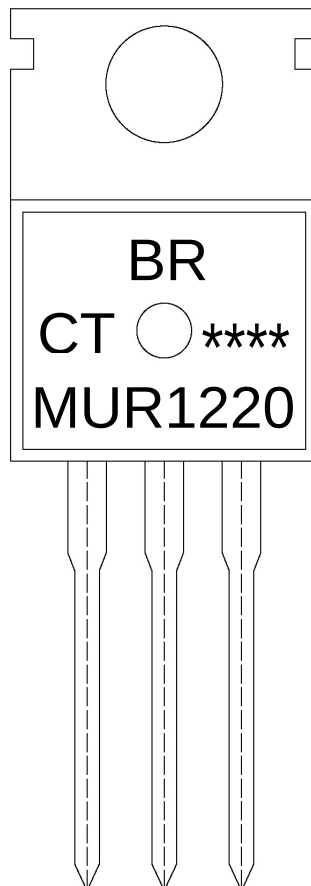
/ Package Dimensions

单位: mm TO-220 E



Symbol	Dimensions in millimeters		Symbol	Dimensions in millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.27	1.4
B	3.56	3.64	B1	6.3	6.7
L	15.7	16.1	B2	9.0	9.4
C1	0.4	0.6	h1	1.22	1.32
b1	1.22	1.32	q	2.24	2.34
k	0.2	0.25		1.45	

/ Marking Instructions



EU

P XU4553

FW:

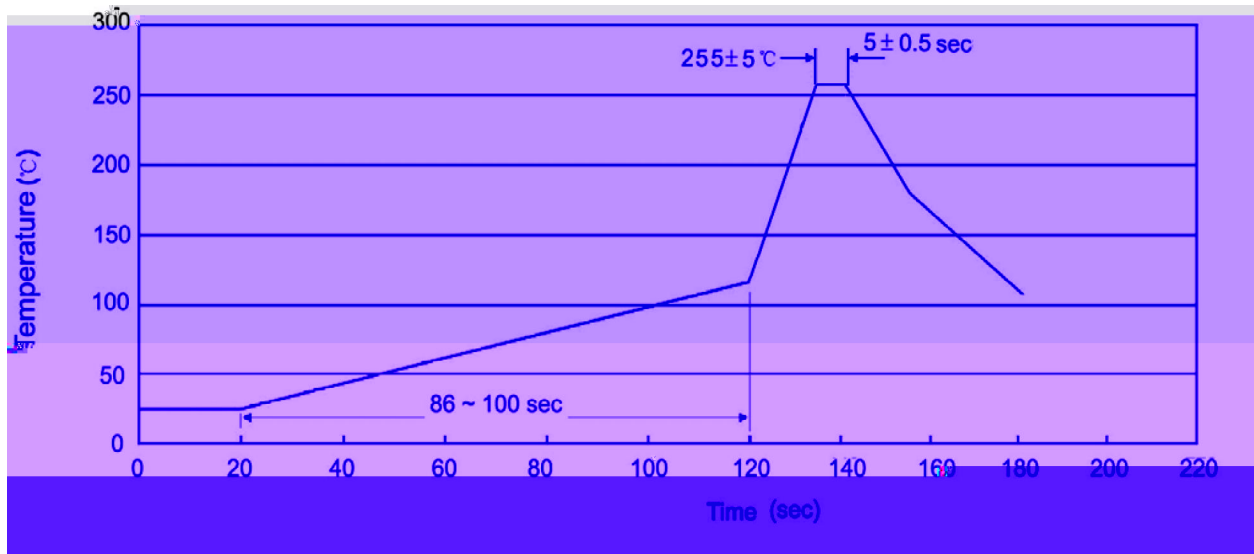
Note:

BR: Company Code

MUR1220 Product Type.

CT: Internal Structure

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


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


Note:

- | | | | | | |
|---|------------------------|-------------------|------------------------|--------|--|
| 1 | 25 | 150 $\frac{3}{8}$ | 60 | 90sec; | 1.Preheating:25~150 $\frac{3}{8}$, Time:60~90sec. |
| 2 | 255 $\pm 5\frac{3}{8}$ | | 5 $\pm 0.5\frac{3}{8}$ | | 2.Peak Temp.:255 $\pm 5\frac{3}{8}$, Duration:5 $\pm 0.5\frac{3}{8}$ sec. |
| 3 | | 2 | 10 $\frac{3}{8}$ /sec. | | 3. Cooling Speed: 2~10 $\frac{3}{8}$ /sec. |

/ Resistance to Soldering Heat Test Conditions

270 $\pm 5\frac{3}{8}$ 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 /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices