

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

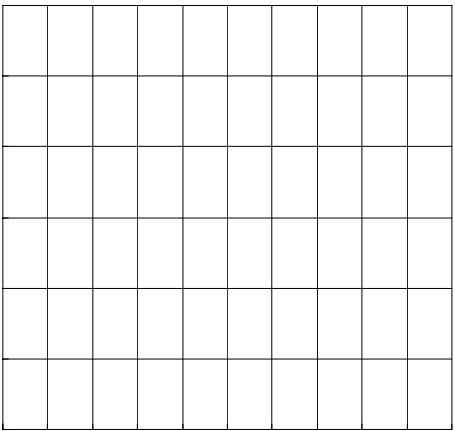
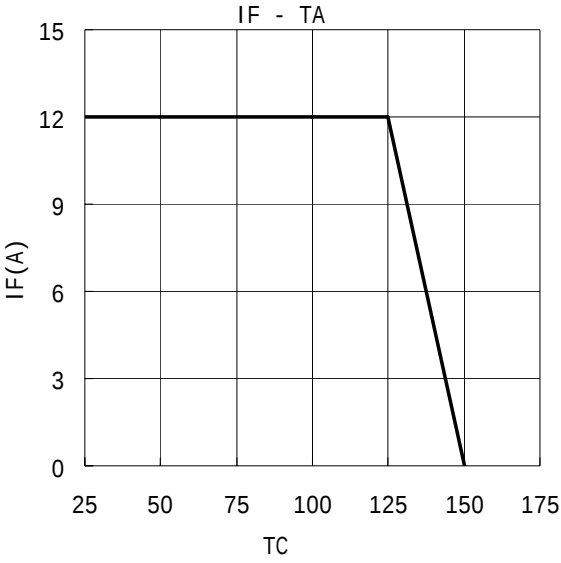
41
effect.

/Short duration pulse test used to minimize self-heating

2.
single chip

/ Unless otherwise noted, values for the parameters of a

/ Electrical Characteristic Curve



Technical drawing of a mechanical part, showing a cross-section and a side view. The drawing includes dimensions and a table of values.

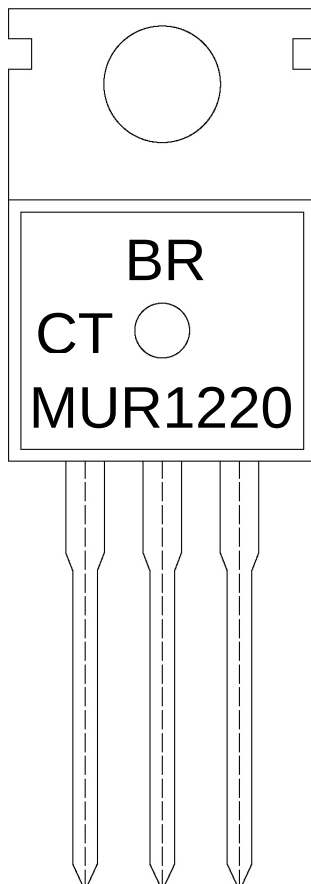
Dimensions and Symbols:

- A : Overall width of the top flange.
- C : Width of the top flange at the right end.
- L : Length of the main body.
- $B1$: Thickness of the main body.
- a : Distance from the center of the top flange to the start of the main body.
- $b1$: Thickness of the main body at the bottom.
- $C1$: Thickness of the main body at the bottom.
- $a1$: Distance from the center of the top flange to the start of the main body at the bottom.
- k : Thickness of the top flange.
- C : Width of the top flange at the bottom.
- 3° : Fillet radius.

Table of Values:

DIMENSIONS IN MILLIMETERS			DIMENSIONS IN MILLIMETERS		
Symbol	Min	Max	Symbol	Min	Max
Δ	9.8	10.2	C	1.2	1.4
$B1$	9.0	9.4	$C1$	1.2	1.4
a	16.1	16.5	$a1$	16.1	16.5
k	1.2	1.4	C	1.2	1.4
$b1$	1.2	1.4	$C1$	1.2	1.4
$a1$	16.1	16.5	a	16.1	16.5

/ Marking Instructions



EU

P XU4553

FW:

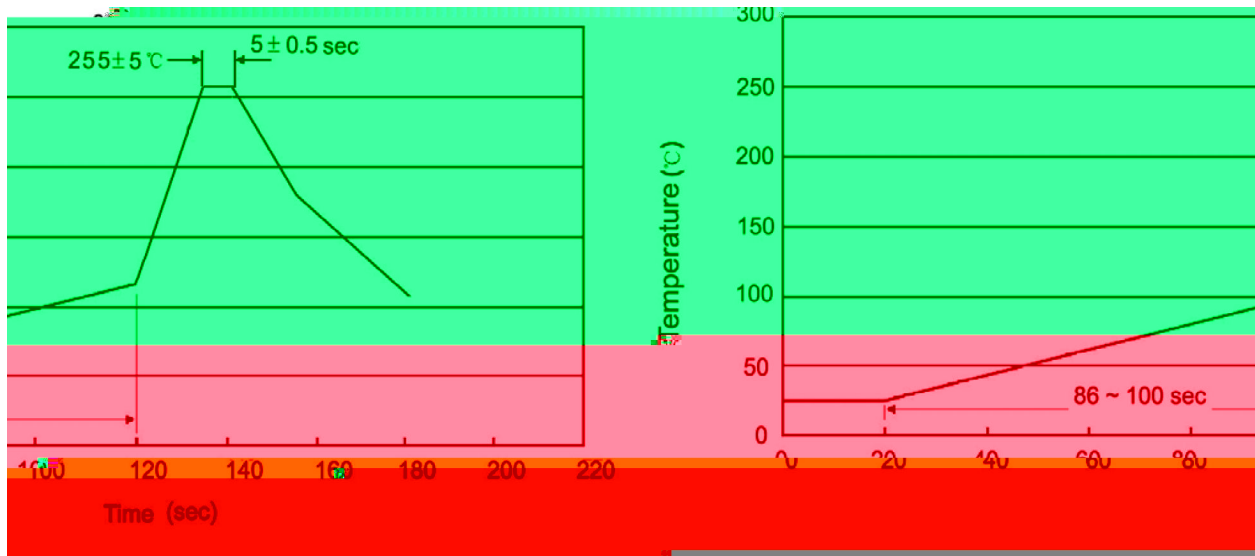
Note:

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% 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)		

/ TUBE

Package Type	Units					Dimension (unit mm ³)		

/ Notices