

MURB1660CT

Rev.F May.-2016

/ Descriptions

TO-263

Ultrafast Recovery Diode in a TO-263 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 2,4 Cathode

PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

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
Average Forward Current	I_F	2×8	A
Non Repetitive Peak Surge Current	I_{FSM}	125	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	2.5	/W
Junction and Storage Temperature Range	T_j, T_{stg}	-55~150	

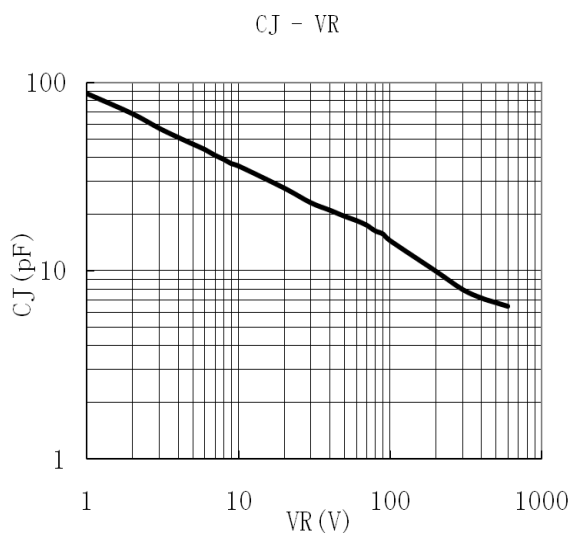
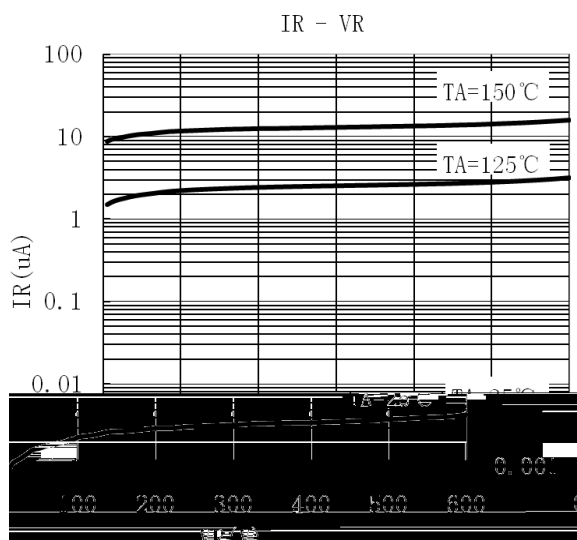
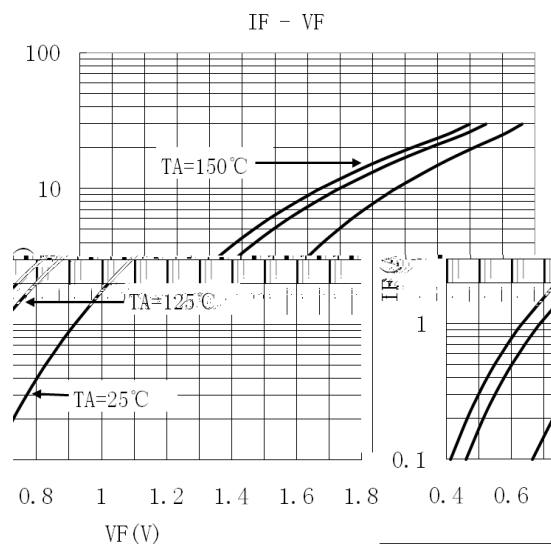
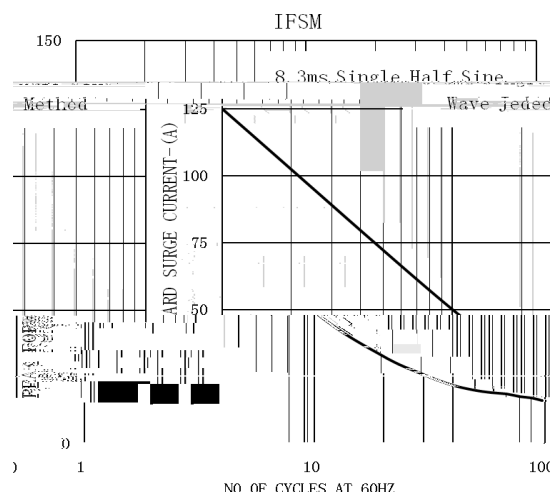
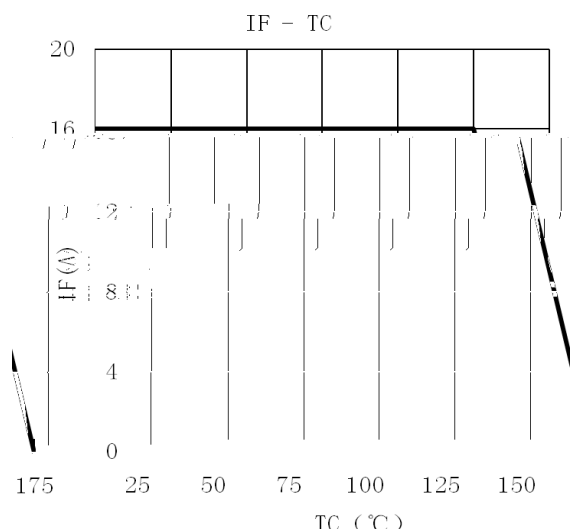
/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=8\text{A}(T_C=25^\circ\text{C})$			1.8	V
		$I_F=8\text{A}(T_C=150^\circ\text{C})$		1.05	1.3	V
		$I_F=16\text{A}(T_C=125^\circ\text{C})$			2.0	V
		$I_F=16\text{A}(T_C=150^\circ\text{C})$		1.28	1.6	V
Instantaneous Reverse Current ^(Note1)	I_R	$V_R=600\text{V}(T_a=25^\circ\text{C})$			5	μA
		$V_R=600\text{V}(T_a=150^\circ\text{C})$		16	100	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{RR}=0.25\text{A}$			50	ns

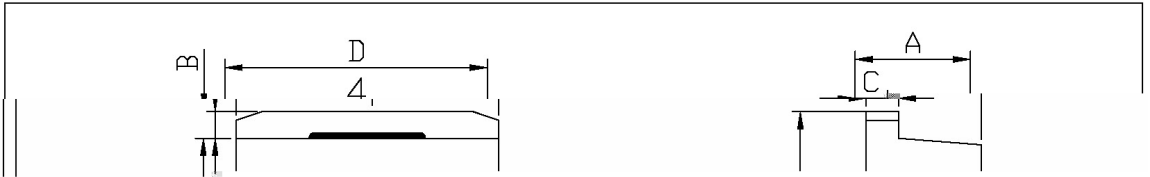
/Notes:

1. /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



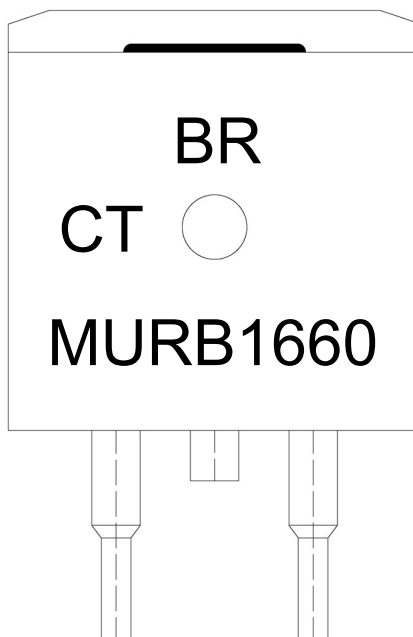
/ Package Dimensions



单位: mm

Symbol	Dimensions in Millimeters		Symbol	Dimensions in Millimeter	
	Min	Max		Min	Max
A	4.30	4.70	E	9.00	9.40
B	1.00	1.40	e1	2.34	2.74
b	0.70	0.90	e2	4.88	5.28
b1	1.15	1.35	L1	15.00	16.0
b2	0.40	0.60	L2	2.24	2.6
C	1.20	1.40	L3	1.20	1.
D	9.80	10.20			

/ Marking Instructions



BR

MURB1660

CT:

Note:

BR: Company Code.

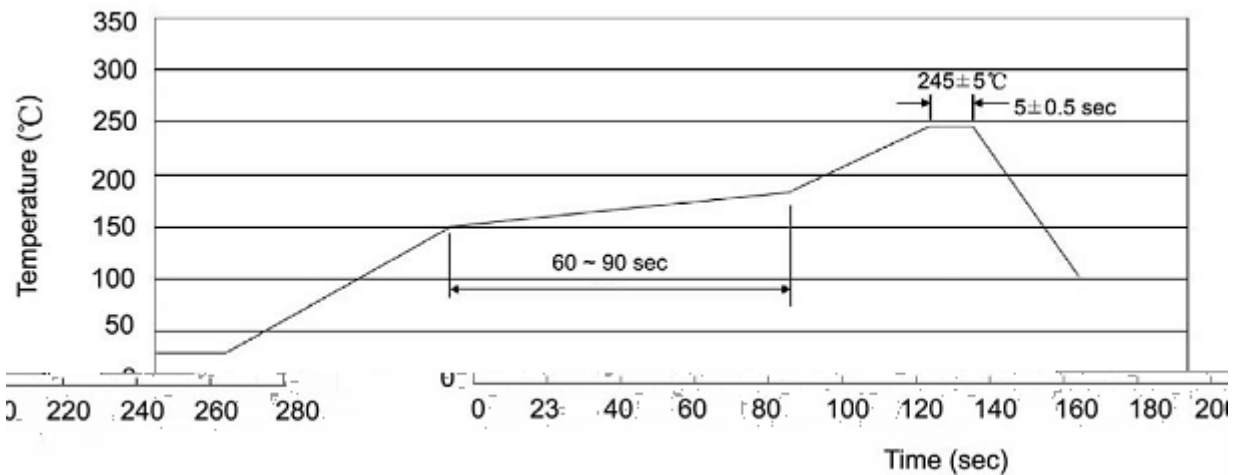
MURB1660 Product Type.

CT: Internal Structure

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



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Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 卷盘	卷盘 盒	只 盒	盒 箱	只 箱		盒	箱
						"		

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管							