

MURB1040CT

Rev.A Oct.-2022

/ Descriptions

Fast Recovery Epi Diodes in a TO-263 Plastic Package.

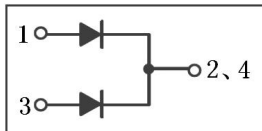
/ Features

High frequency operation, High surge forward current capability, HF Product.

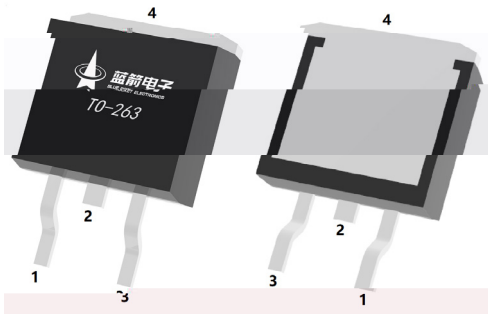
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Anode

PIN 2 4 Cathode

PIN 3 Anode

/ Marking

See Marking Instructions.

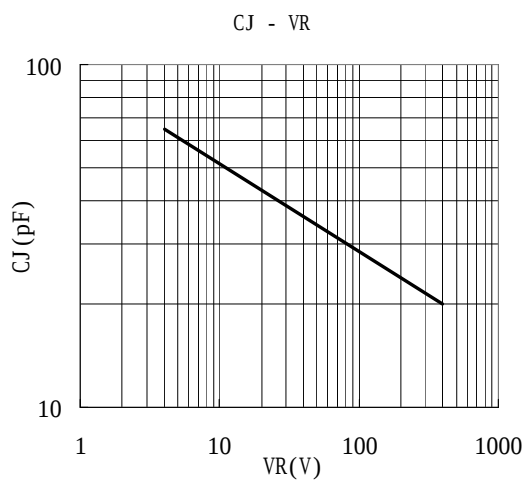
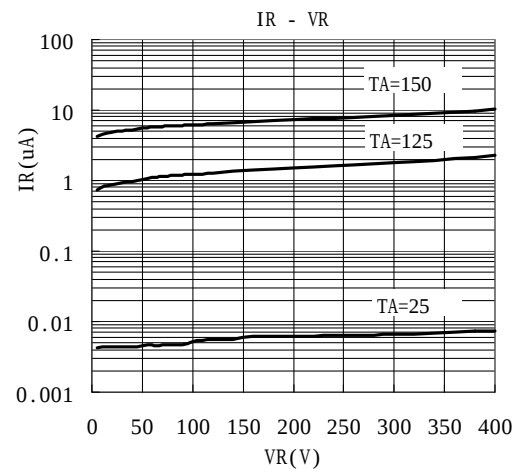
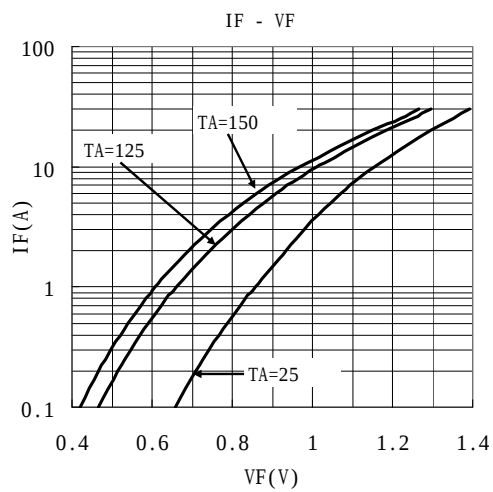
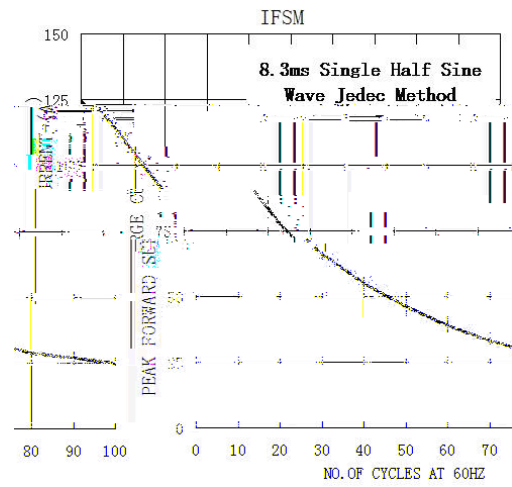
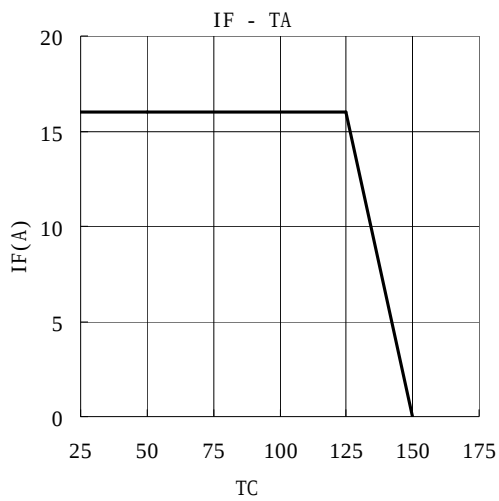
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS voltage	V_{RMS}	280	V
Maximum DC blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2x5	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	125	A
Maximum Thermal Resistance Junction To Case	$R_{\theta Jc}$	2.8	/W
Operation Junction Temperature and Storage Temperature	T_j, T_{stg}	-55 150	

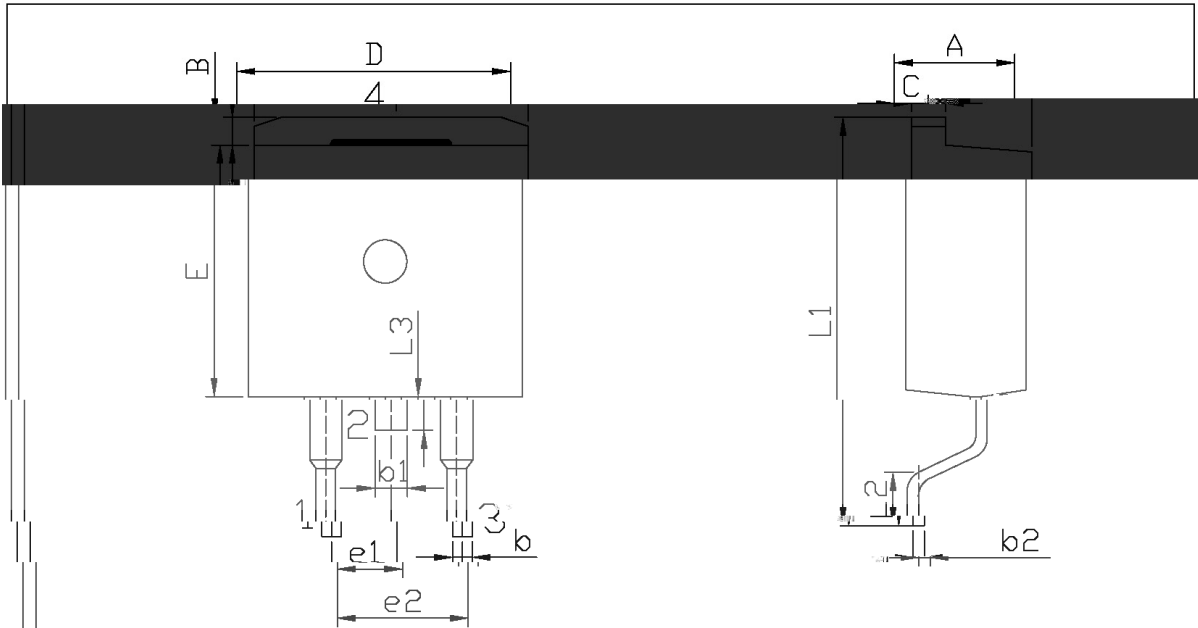
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating	Unit
Forward Voltage	V_F	$I_F=5A \quad T_c=25$	1.3	V
Instantaneous Reverse Current	I_R	$V_R=400V$ $T_a=25$	1	μA
		$V_R=400V$ $T_a=125$	100	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5A \quad I_R=1.0A$ $I_{REC}=0.25A$	35	ns

/ Electrical Characteristic Curve



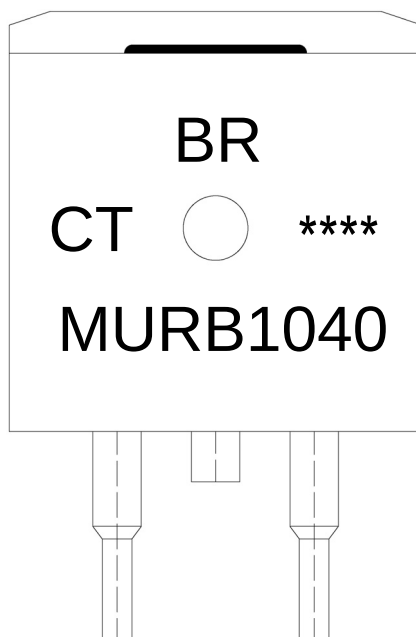
I Package Dimensions



单位: mm

Symbol			Dimensions In Millimeters		Symbol			Dimensions In Millimeters	
			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	5.29

/ Marking Instructions



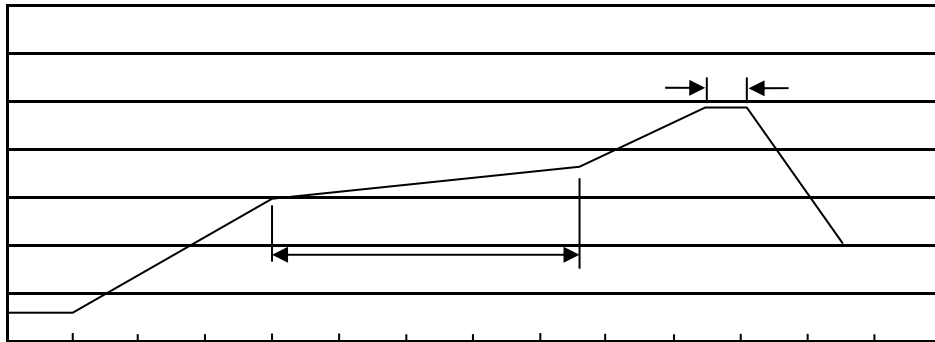
Note:

BR: Company Code

MURB1040: Product Type

CT: Internal Structure

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


() / Temperature Profile for IR Reflow Soldering(Pb-Free)


Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , 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
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/ Packaging SPEC.
/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
TO-263	800	1	800	6	4,800	13 ×24	360×360×50	380×335×366

/ 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-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

/ Notices