

■ Productor Character

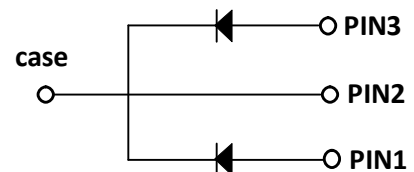
- Half Bridge Rectified、Common Cathode Structure.
- Multilayer Metal -Silicon Potential Structure.
- Beautiful High Temperature Character.
- Have Over Voltage protect loop, high reliability.
- RoHs Product.

■ Primary Use

- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Invers Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

■ Summarize

- BD1040CS/BD1040CT Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.



Absolute Maximum Ratings

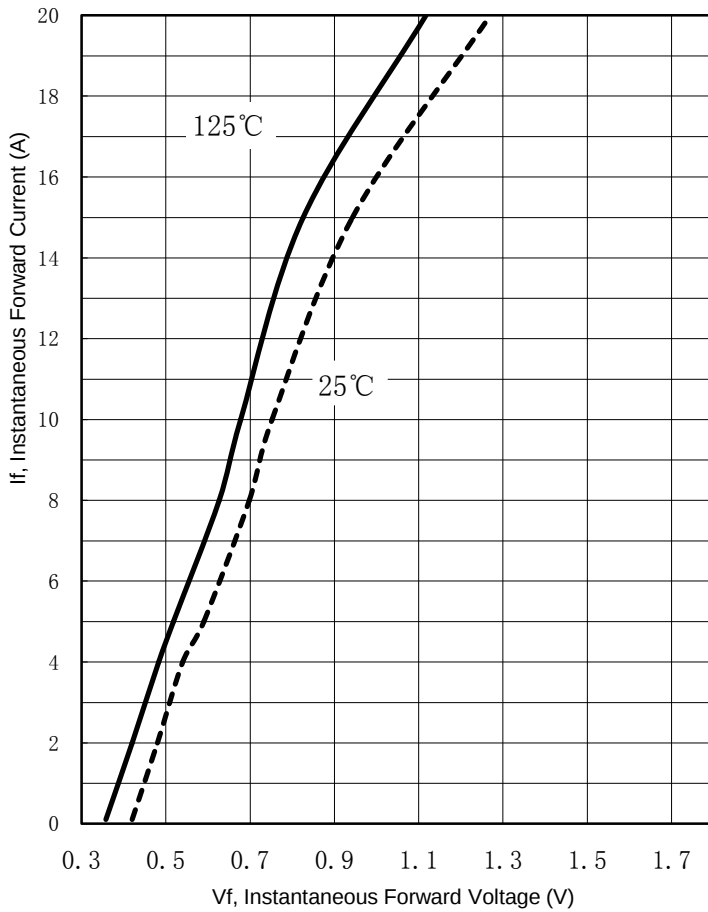
Item	Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage	VRRM	40	V
*Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	IFAV	10	A
Typical Thermal Resistance (per leg) Package = TO-252	R _{θJc}	2	°C/W
		4	°C/W
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	IFSM	120	A
Maximum Rate of Voltage Change (at Rated VR)	dv/dt	10000	V/uS
Peak Repetitive Reverse Surge Current (2uS-1Khz)	IRRM	1	A
Operating Junction Temperature	TJ	-40- +175	°C
Storage Temperature	TSTG	-40- +175	°C

Electricity Character

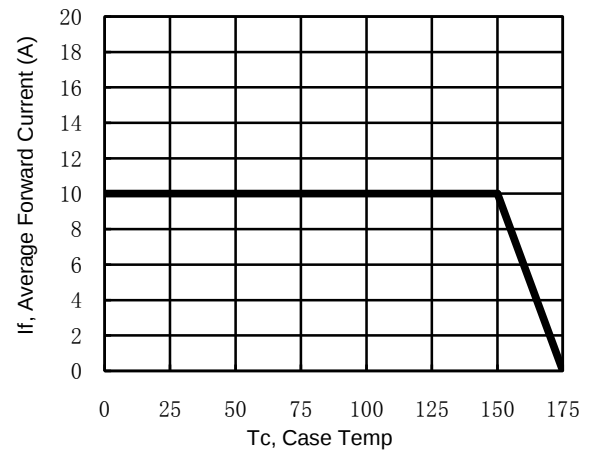
Item	Test Condition		TPY.	MAX.	Unit
IR	TJ =25°C	VR=VRRM		10	uA
	TJ =125°C			1	mA
VF	TJ =25°C	IF=5A		0.55	V
	TJ =125°C	IF=5A	0.41	0.47	V

*IF(AV)= 5A×2

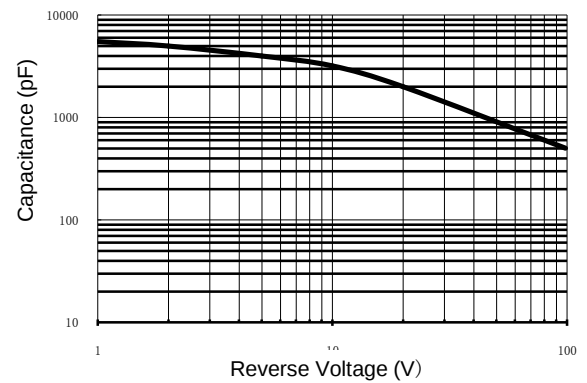
The forward voltage and forward current curve.



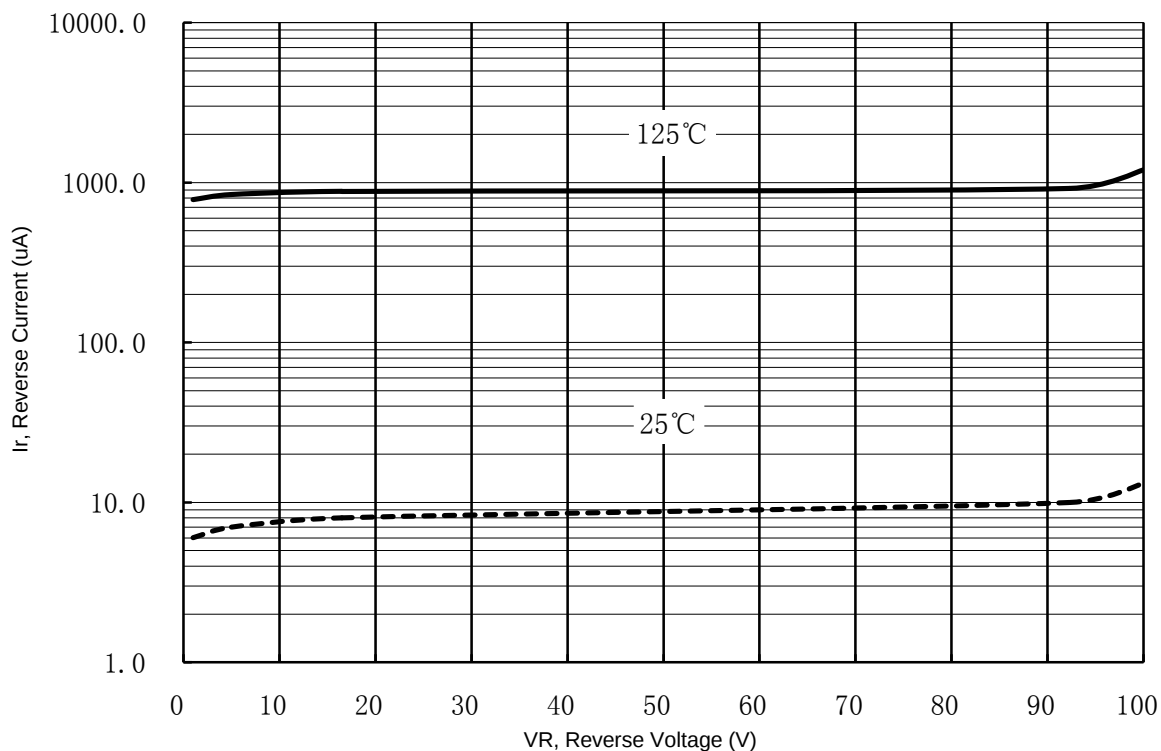
Current Derating Curve, Per Element

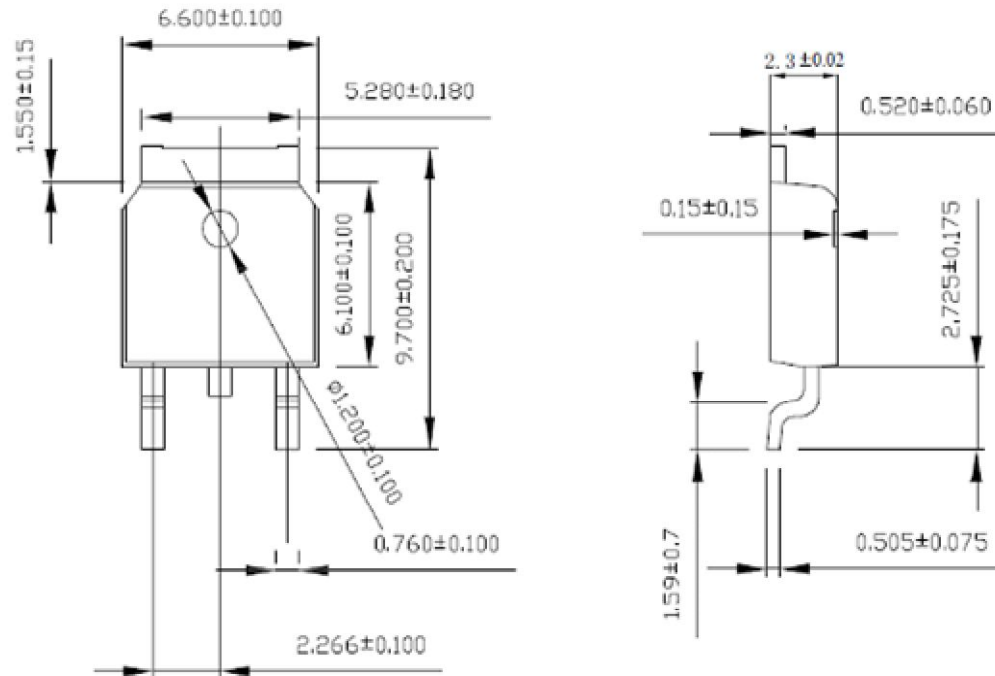
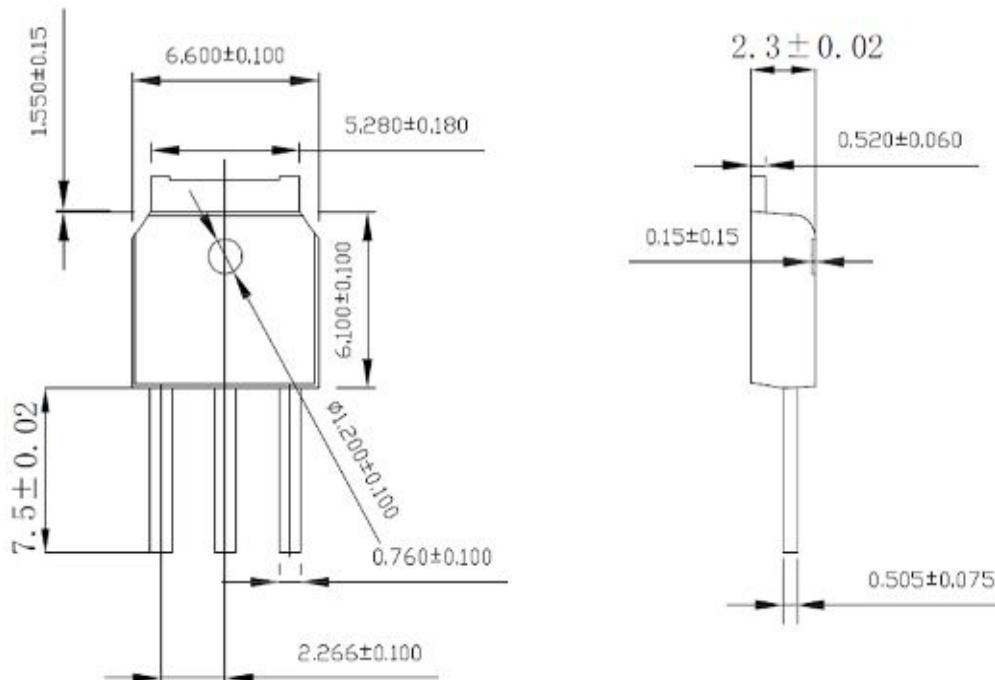


The crunode capacitance curve



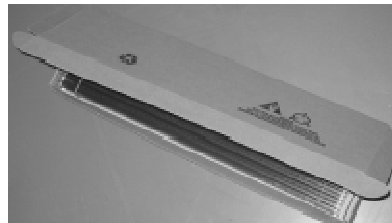
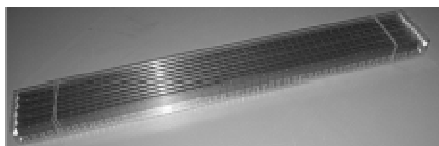
The reverse leak current and the reverse voltage (single-device) curve.



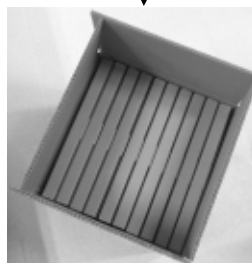
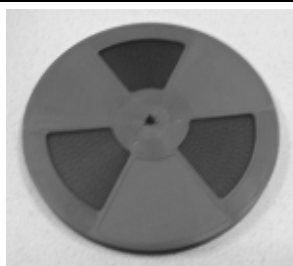
Package Outline Dimensions**TO-252-2L****TO-251-3L**

Packing Information

Part Number	Quantity	Size (mm)
tube	80 pieces	540*15*5
inner box	4000 pieces	554*135*70
outer container	40000 pieces	572*382*300



Part Number	Quantity	Size (mm)
reel	50 pieces	330*25
inner box	2500 pieces	340*336*29
outer container	25000 pieces	353*346*365



Marking



BD1045CT

XXXX

1.BD1045CT/BD1045CS 为产品型号

2.XXXX代表日期码，第一码表示公元年的最后一码，第二码表示生产时当月码 (A,B,C...为一月，二月，三月...),第三，四码表示大量生产时批次码
例如:2013年第一月生产的，D/C为HAXX。

3.TO-252封装型号后面加“CS”，TO-251封装型号后面加“CT”