

# **IN17027 【 Revision of BZD27C Series Datasheet 】 Comparison report**

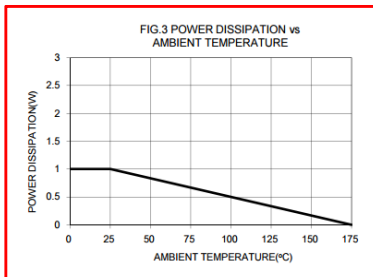
Prepared by Riona  
Checked by Henry  
Approved by Henry  
Issued date on Mar.21.2017  
Revision for A

## Subject: BZD27C SERIES

old datasheet version

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Forward voltage @ I <sub>F</sub> =0.2A	V <sub>F</sub>	1.2	Volts
Power dissipation at T <sub>J</sub> =25°C	P <sub>tot</sub>	2.3	Watts
T <sub>A</sub> =25°C (Note 1)		1.0	
Non-repetitive peak pulse power dissipation 100µs square pulse	P <sub>ZSM</sub>	300	Watts
Non-repetitive peak pulse power dissipation 10/1000µs waveform (BZD27C6V8P to BZD27C100P)	P <sub>RSM</sub>	150	Watts
Non-repetitive peak pulse power dissipation 10/1000µs waveform (BZD27C110P to BZD27C220P)	P <sub>RSM</sub>	100	Watts
Thermal resistance junction to ambient (Note 1)	R <sub>θJA</sub>	180	°C/W
Thermal resistance junction to lead	R <sub>θJL</sub>	30	°C/W
Operating and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +175	°C

Note 1: Mounted on Cu-Pad size 5mm x 5mm



new datasheet version

ABSOLUTE MAXIMUM RATINGS (T <sub>A</sub> = 25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Forward voltage @ I <sub>F</sub> =0.2A	V <sub>F</sub>	1.2	Volts
Power dissipation at T <sub>J</sub> =25°C	P <sub>tot</sub>	2.3	Watts
T <sub>A</sub> =25°C (Note 1)		1.0	
Non-repetitive peak pulse power dissipation 100µs square pulse (Note 2)	P <sub>ZSM</sub>	300	Watts
Non-repetitive peak pulse power dissipation 10/1000µs waveform (BZD27C6V8P to BZD27C100P)	P <sub>RSM</sub>	150	Watts
Non-repetitive peak pulse power dissipation 10/1000µs waveform (BZD27C110P to BZD27C220P)	P <sub>RSM</sub>	100	Watts
Operating and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +175	°C

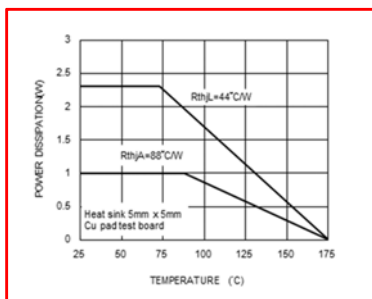
**Notes:**

1. Mounted on Cu-Pad size 5mm x 5mm
2. T<sub>J</sub>=25°C prior to surge

THERMAL PERFORMANCE			
PARAMETER	SYMBOL	LIMIT	UNIT
Junction-to-lead thermal resistance	R <sub>θJL</sub>	44	°C/W
Junction-to-ambient thermal resistance	R <sub>θJA</sub>	88	°C/W
Junction-to-case thermal resistance	R <sub>θJC</sub>	48	°C/W

Thermal Performance Note: Units mounted on recommended PCB (5mm x 5mm Cu pad test board)

Fig.3 POWER DISSIPATION v.s TEMPERATURE change to below



\*\*\*\*\* The copyright of document and business secret belong to TSC, and no copies should be made without any permission \*\*\*\*\*