

Features

- ✧ Silicon zener diodes
- ✧ Low profile surface-mount package
- ✧ Zener and surge current specification
- ✧ Low leakage current
- ✧ Excellent stability
- ✧ High temperature soldering guaranteed:
260°C / 10 seconds
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



Mechanical Data

- ✧ Case: Sub SMA Plastic
- ✧ Terminals: Pure tin plated, lead free
- ✧ Packaging method: refer to package code
- ✧ Marking code: as table
- ✧ Weight: 0.01 gram

Ordering Information (example)

Part No.	Package	Packing	Packing code	Packing code (Green)
BZD17C11P	Sub-SMA	3K / 7" REEL	RV	RVG

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Forward Voltage @ $I_F=0.2A$	V_F	1.2	Volts
Power Dissipation at $T_L=80^\circ C$ $T_A=25^\circ C$ (Note 1)	P_{tot}	2.3 0.8	Watts
Non-Repetitive Peak Pulse Power Dissipation 100us square pulse (Note 2)	P_{ZSM}	300	Watts
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	180	$^\circ C/W$
Thermal Resistance Junction to Lead	$R_{\theta JL}$	30	$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +175	$^\circ C$

Note 1: Mounted on Cu-Pad size 5mm x 5mm ($\geq 40\mu m$ thick)

Note 2: $T_J=25^\circ C$ Prior to Surge

RATINGS AND CHARACTERISTIC CURVES (BZD17C SERIES)

FIG. 1 TYPICAL FORWARD CHARACTERISTICS

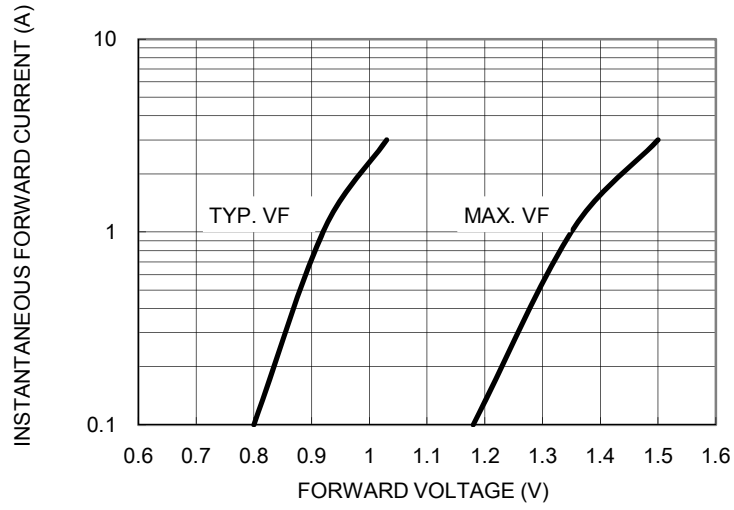


FIG. 2 TYP. DIODE CAPACITANCE vs REVERSE VOLTAGE

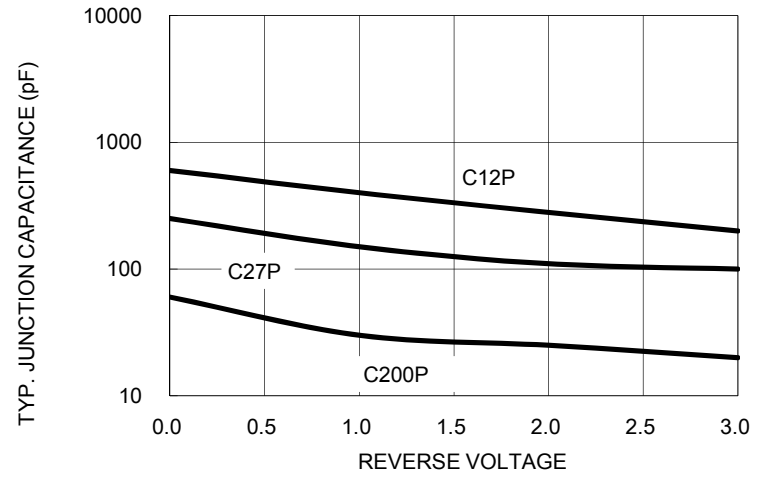
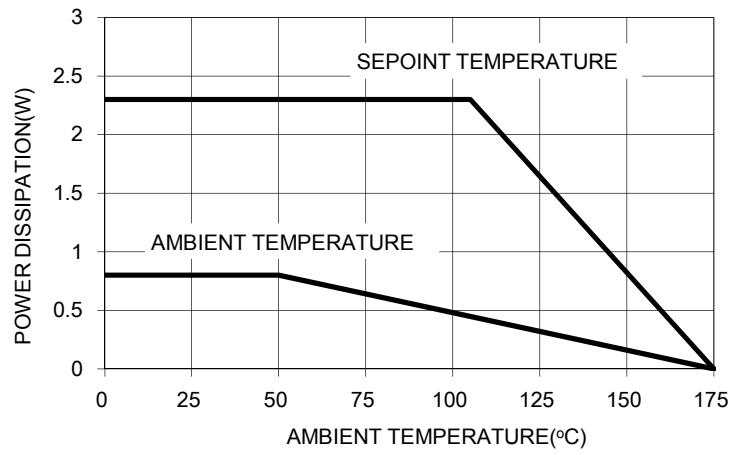


FIG.3 POWER DISSIPATION vs AMBIENT TEMPERATURE



ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Device	Device Marking Code	Working Voltage (Note 1)		Differential Resistance		Temperature Coefficient		Test Current	Reverse Current@ Reverse Voltage	
		V _Z @ I _{ZT}		r _{dif} @ I _Z		ALPH _Z @ I _Z		I _{ZT}	I _R	V _R
		V		Ω		%/°C		mA	uA	V
		Min.	Max	typ	Max.	Min.	Max		Max.	
BZD17C11P	J2	10.4	11.6	4	7	0.05	0.10	50	4.0	8.2
BZD17C12P	J3	11.4	12.7	4	7	0.05	0.10	50	3.0	9.1
BZD17C13P	J4	12.4	14.1	5	10	0.05	0.10	50	2.0	10
BZD17C15P	J5	13.8	15.6	5	10	0.05	0.10	25	1.0	11
BZD17C16P	J6	15.3	17.1	6	15	0.06	0.11	25	1.0	12
BZD17C18P	J7	16.8	19.1	6	15	0.06	0.11	25	1.0	13
BZD17C24P	K0	22.8	25.6	7	15	0.06	0.11	25	1.0	18
BZD17C27P	K1	25.1	28.9	7	15	0.06	0.11	25	1.0	20
BZD17C33P	K3	31	35	8	15	0.06	0.11	25	1.0	24
BZD17C36P	K4	34	38	21	40	0.06	0.11	10	1.0	27
BZD17C39P	K5	37	41	21	40	0.06	0.11	10	1.0	30
BZD17C43P	K6	40	46	24	45	0.07	0.12	10	1.0	33
BZD17C47P	K7	44	50	24	45	0.07	0.12	10	1.0	36
BZD17C51P	K8	48	54	25	60	0.07	0.12	10	1.0	39
BZD17C62P	L0	58	66	25	80	0.08	0.13	10	1.0	47
BZD17C68P	L1	64	72	25	80	0.08	0.13	10	1.0	51
BZD17C75P	L2	70	79	30	100	0.08	0.13	10	1.0	56
BZD17C100P	L5	94	106	60	200	0.09	0.13	4	1.0	75
BZD17C120P	L7	114	127	150	300	0.09	0.13	4	1.0	91
BZD17C180P	M1	168	191	280	450	0.09	0.13	4	1.0	130
BZD17C200P	M2	188	212	350	750	0.09	0.13	4	1.0	150
BZD17C220P	M3	208	233	430	900	0.09	0.13	4	1.0	160

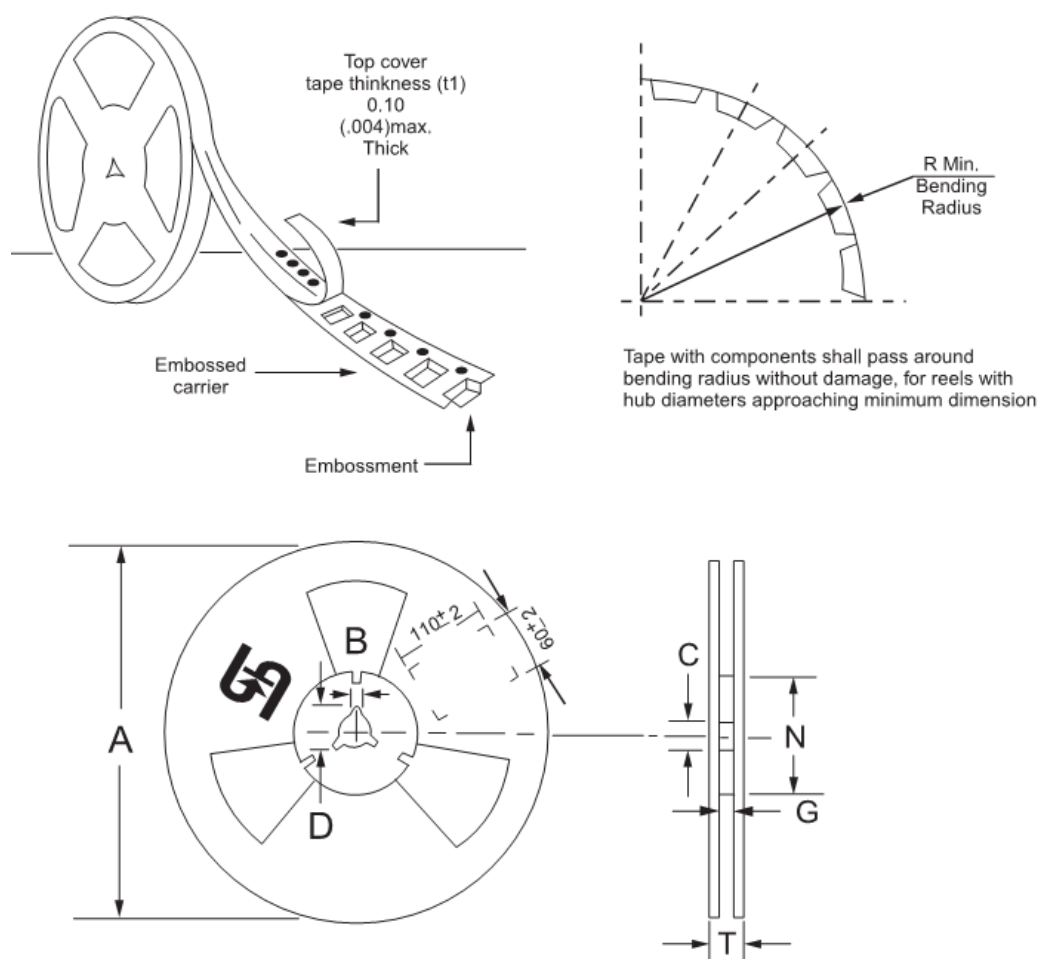
Notes: 1. Pulse test: tp ≤ 5ms.

Ordering information

Part No.	Package	Packing	Tape Size	Packing code	Packing code (Green)
BZD17CxxP (Note)	Sub-SMA	1.8K / 7" REEL	8mm	RU	RUG
	Sub-SMA	3K / 7" REEL	8mm	RV	RVG
	Sub-SMA	7.5K / 13" REEL	8mm	RT	RTG
	Sub-SMA	7.5K / 13" Plastic REEL	8mm	MT	MTG
	Sub-SMA	10K / 13" REEL	8mm	RQ	RQG
	Sub-SMA	10K / 13" Plastic REEL	8mm	MQ	MQG
	Sub-SMA	1.8K / 7" REEL	12mm	R3	R3G
	Sub-SMA	3K / 7" REEL	12mm	RF	RFG
	Sub-SMA	7.5K / 13" REEL	12mm	R2	R2G
	Sub-SMA	7.5K / 13" Plastic REEL	12mm	M2	M2G
	Sub-SMA	10K / 13" REEL	12mm	RH	RHG
	Sub-SMA	10K / 13" Plastic REEL	12mm	MH	MHG

Note: "x" is Device Code from "11" thru "220".

Tape & Reel specification

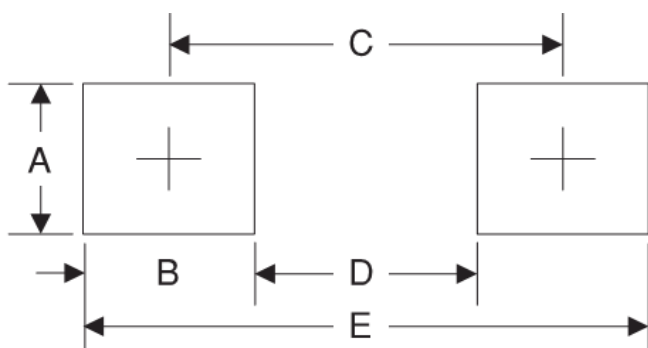


Tape with components shall pass around bending radius without damage, for reels with hub diameters approaching minimum dimension

Reel Size	Tape Size	A	B	C	D	N	G	T
7"	8mm	±2.0	±0.4	+0.5;-0.2	min	±1.0	+0.8;-0	max
	12mm	178	1.9	13	21	62	8.2	10.6
13"	8mm	330	2	13	20.2	75	8.5	14.5
	12mm	330	2	13	20.2	75	12.4	18.4

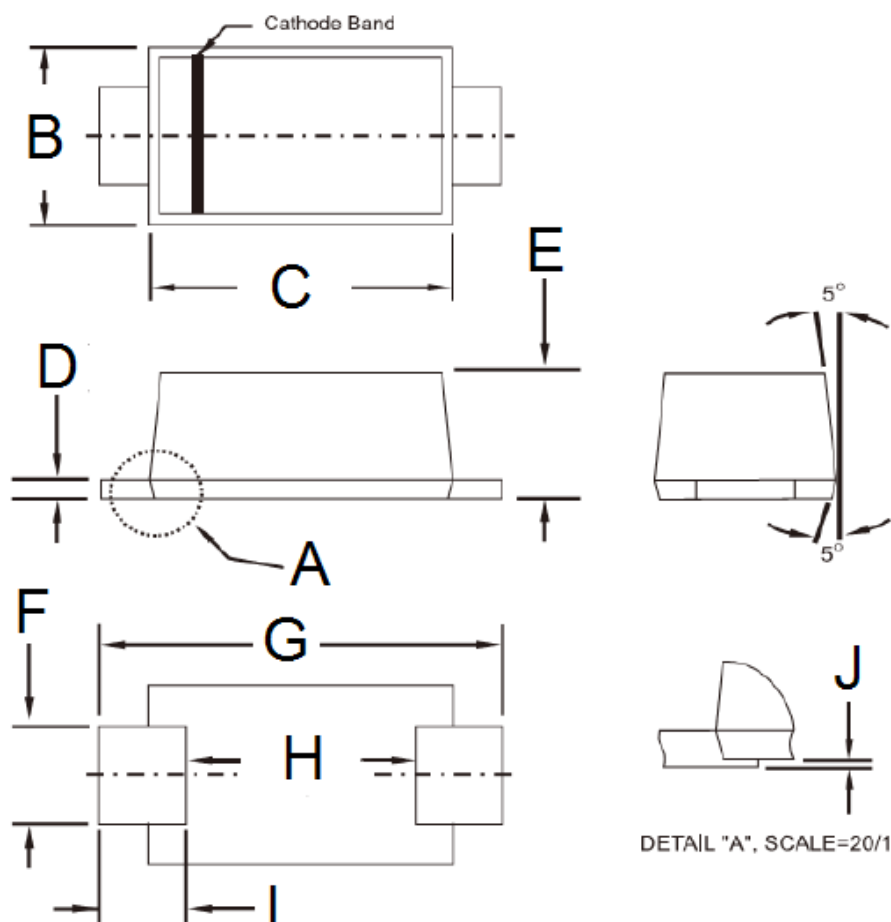
Unit (mm)

Suggested PAD Layout



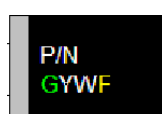
Symbol	Unit(mm)
A	1.4
B	1.2
C	3.1
D	1.9
E	4.3

Package Outline Dimensions



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
B	1.70	1.90	0.067	0.075
C	2.70	2.90	0.106	0.114
D	0.16	0.30	0.006	0.012
E	1.23	1.43	0.048	0.056
F	0.80	1.20	0.031	0.047
G	3.40	3.80	0.134	0.150
H	2.45	2.60	0.096	0.102
I	0.35	0.85	0.014	0.033
J	0.00	0.10	0.000	0.004

Marking Diagram



- P/N = Specific Device Code
- G = Green Compound
- YW = Date Code
- F = Factory Code