



# BZD17C SERIES

## 0.8 Watts Voltage Regulator Diodes

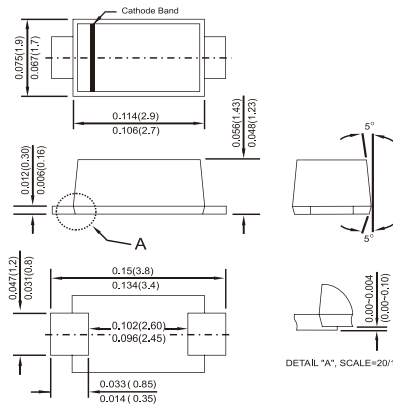
### Sub SMA

### Features

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

### Mechanical Data

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



### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Type Number	Symbol	Value	Units
Forward Voltage @ IF = 0.2A	V <sub>F</sub>	1.2	Volts
Power Dissipation TL=80°C TA=25°C (Note 1)	P <sub>tot</sub>	2.3 0.8	Watts
Non-Repetitive Peak Pulse Power Dissipation 100us square pulse (Note 2)	P <sub>ZSM</sub>	300	Watts
Thermal Resistance Junction to Ambient Air (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>	-65 to + 175	°C

Notes: 1. Mounted on Epoxy-Glass PCB with 3 x 3 mm Cu pads (≥ 40um thick)

2. T<sub>J</sub>=25°C Prior to Surge.

RATINGS AND CHARACTERISTIC CURVES (BZD17C SERIES)

FIG.1- FORWARD CURRENT vs FORWARD VOLTAGE

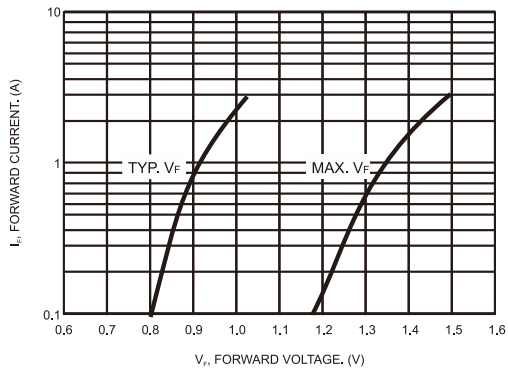


FIG.2- TYP. DIODE CAPACITANCE vs REVERSE VOLTAGE

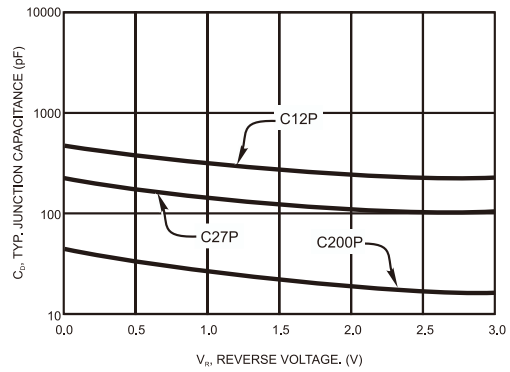
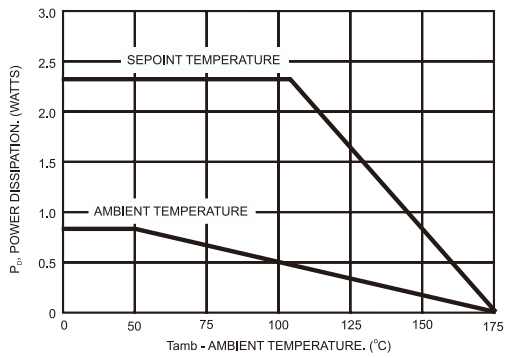


FIG.3- POWER DISSIPATION vs AMBIENT TEMPERATURE



ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Device	Device Marking Code	Zener 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		$\Omega$		%/°C		mA	$\mu\text{A}$	V
		Min.	Max.	typ	Max.	Min.	Max.		Max.	
BZD17C11P	J2	10.4	11.6	4	7	0.05	0.10	50	4	8.2
BZD17C12P	J3	11.4	12.7	4	7	0.05	0.10	50	3	9.1
BZD17C13P	J4	12.4	14.1	5	10	0.05	0.10	50	2	10
BZD17C15P	J5	13.8	15.6	5	10	0.05	0.10	25	1	11
BZD17C16P	J6	15.3	17.1	6	15	0.06	0.11	25	1	12
BZD17C18P	J7	16.8	19.1	6	15	0.06	0.11	25	1	13
BZD17C24P	K0	22.8	25.6	7	15	0.06	0.11	25	1	18
BZD17C27P	K1	25.1	28.9	7	15	0.06	0.11	25	1	20
BZD17C33P	K3	31	35	8	15	0.06	0.11	25	1	24
BZD17C36P	K4	34	38	21	40	0.06	0.11	10	1	27
BZD17C39P	K5	37	41	21	40	0.06	0.11	10	1	30
BZD17C43P	K6	40	46	24	45	0.07	0.12	10	1	33
BZD17C47P	K7	44	50	24	45	0.07	0.12	10	1	36
BZD17C51P	K8	48	54	25	60	0.07	0.12	10	1	39
BZD17C62P	L0	58	66	25	80	0.08	0.13	10	1	47
BZD17C68P	L1	64	72	25	80	0.08	0.13	10	1	51
BZD17C75P	L2	70	79	30	100	0.08	0.13	10	1	56
BZD17C100P	L5	94	106	60	200	0.09	0.13	4	1	75
BZD17C120P	L7	114	127	150	300	0.09	0.13	4	1	91
BZD17C180P	M1	168	191	280	450	0.09	0.13	4	1	130
BZD17C200P	M2	188	212	350	750	0.09	0.13	4	1	150
BZD17C220P	M3	208	233	430	900	0.09	0.13	4	1	160

Notes:1. Pulse test:  $t_p \leq 5\text{ms}$ .