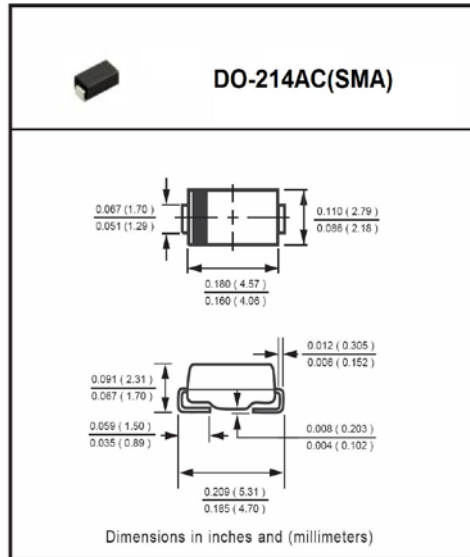


BZG03C10 THRU BZG03C270



Features

- Plastic package has Underwriters Laboratory Flammability Classification 94 V-0
- For surface mounted applications
- **Voltage stabilization**
- **Glass passivated junction**
- High temperature soldering guaranteed: 260 °C/10 seconds at terminal
- Lead and body according with RoHS standard

Mechanical Data

- Case: Molded plastic body
- Terminals: Solder plated
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Absolute Maximum Ratings $T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test Conditions	Symbol	Value	Unit
Power dissipation	$R_{thJA} < 25\text{K/W}$, $T_{amb} = 100^{\circ}\text{C}$	P_V	3	W
	$R_{thJA} < 100\text{K/W}$, $T_{amb} = 50^{\circ}\text{C}$	P_V	1.25	W
Non repetitive peak surge power dissipation	$t_p = 100\mu\text{s}$ sq.pulse, $T_j = 25^{\circ}\text{C}$ prior to surge	P_{ZSM}	600	W
Junction temperature		T_j	175	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-65...+150	$^{\circ}\text{C}$

Maximum Thermal Resistance $T_j = 25^{\circ}\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Junction lead		R_{thJL}	25	K/W
Junction ambient	mounted on epoxy-glass hard tissue, Fig. 1a	R_{thJA}	150	K/W
	mounted on epoxy-glass hard tissue, Fig. 1b	R_{thJA}	125	K/W
	mounted on Al-oxid-ceramic (Al_2O_3), Fig. 1b	R_{thJA}	100	K/W

Electrical Characteristics $T_j = 25^{\circ}\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 0.5\text{A}$		V_F			1.2	V

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Electrical Characteristics (TA = 25°C unless otherwise noted)

Type	Vz			rzj and TKvz at					IR at	
	V			Ω		%K		mA	uA	VR
	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.			
BZG03C10	9.4	10	10.6	2	4	0.05	0.09	50	10	7.5
BZG03C11	10.4	11	11.6	4	7	0.05	0.10	50	4	8.2
BZG03C12	11.4	12	12.7	4	7	0.05	0.10	50	3	9.1
BZG03C13	12.4	13	14.1	5	10	0.05	0.10	50	2	10
BZG03C15	13.8	15	15.6	5	10	0.05	0.10	50	1	11
BZG03C16	15.3	16	17.1	6	15	0.06	0.11	25	1	12
BZG03C18	16.8	18	19.1	6	15	0.06	0.11	25	1	13
BZG03C20	18.8	20	21.2	6	15	0.06	0.11	25	1	15
BZG03C22	20.8	22	23.3	6	15	0.06	0.11	25	1	16
BZG03C24	22.8	24	25.6	7	15	0.06	0.11	25	1	18
BZG03C27	25.1	27	28.9	7	15	0.06	0.11	25	1	20
BZG03C30	28	30	32	8	15	0.06	0.11	25	1	22
BZG03C33	31	33	35	8	15	0.06	0.11	25	1	24
BZG03C36	34	36	38	21	40	0.06	0.11	10	1	27
BZG03C39	37	39	41	21	40	0.06	0.11	10	1	30
BZG03C43	40	43	46	24	45	0.07	0.12	10	1	33
BZG03C47	44	47	50	24	45	0.07	0.12	10	1	36
BZG03C51	48	51	54	25	60	0.07	0.12	10	1	39
BZG03C56	52	56	60	25	60	0.07	0.12	10	1	43
BZG03C62	58	62	66	25	80	0.08	0.13	10	1	47
BZG03C68	64	68	72	25	80	0.08	0.13	10	1	51
BZG03C75	70	75	79	30	100	0.08	0.13	10	1	56
BZG03C82	77	82	87	30	100	0.08	0.13	10	1	62
BZG03C91	85	91	96	60	200	0.09	0.13	5	1	68
BZG03C100	94	100	106	60	200	0.09	0.13	5	1	75
BZT03C110	104	110	116	80	250	0.09	0.13	5	1	82
BZG03C120	114	120	127	80	250	0.09	0.13	5	1	91
BZT03C130	124	130	141	110	300	0.09	0.13	5	1	100
BZG03C150	138	150	156	130	300	0.09	0.13	5	1	110
BZG03C160	158	160	171	150	350	0.09	0.13	5	1	120
BZG03C180	168	180	191	180	400	0.09	0.13	5	1	130
BZT03C200	188	200	212	200	500	0.09	0.13	5	1	150
BZT03C220	208	220	233	350	750	0.09	0.13	2	1	160
BZT03C240	228	240	256	400	850	0.09	0.13	2	1	180
BZT03C270	251	270	289	450	1000	0.09	0.13	2	1	200

Notes1. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch

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Characteristics ($T_j = 25^\circ\text{C}$ unless otherwise specified)

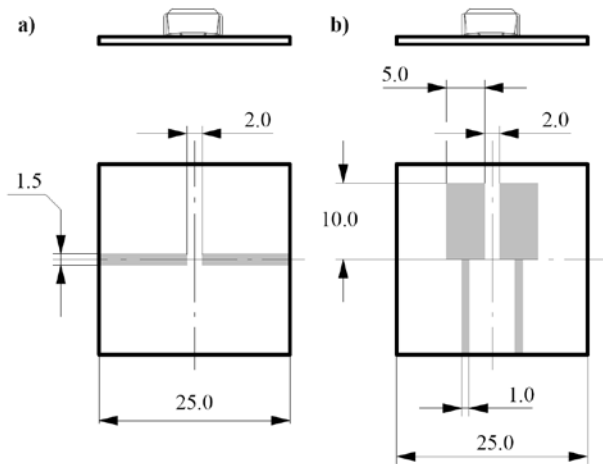


Figure 1. Boards for R_{thJA} definition
(conner overlav 35μ)

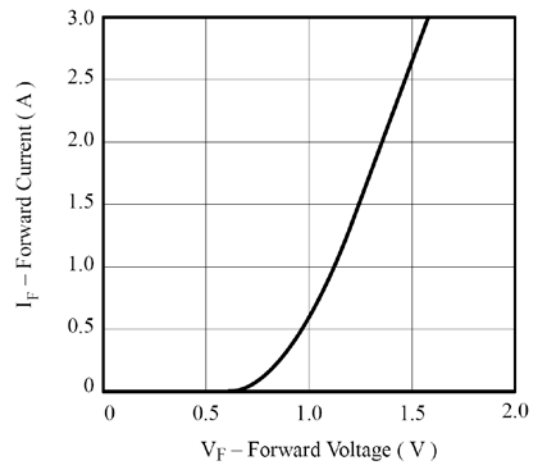


Figure 3. Forward Current vs. Forward Voltage

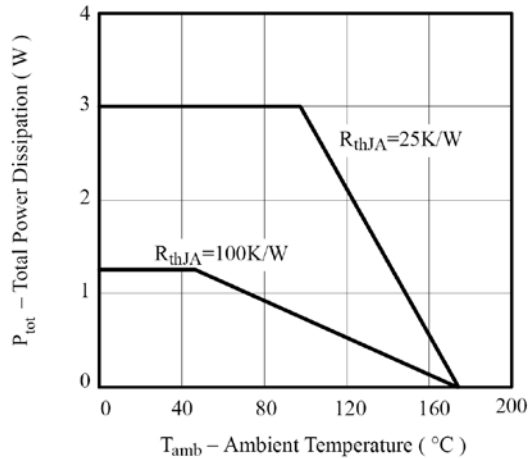


Figure 2. Total Power Dissipation vs. Ambient Temperature

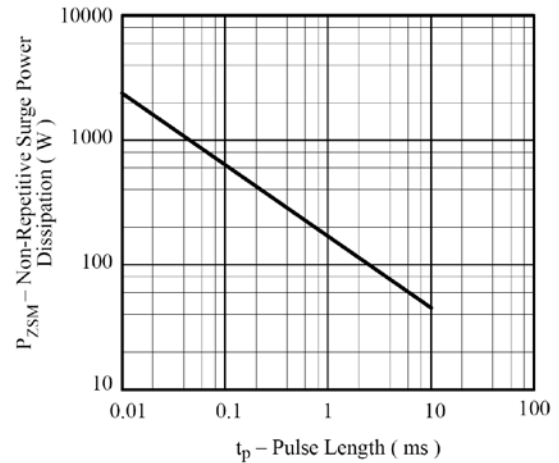


Figure 4. Non Repetitive Surge Power Dissipation vs. Pulse Length

