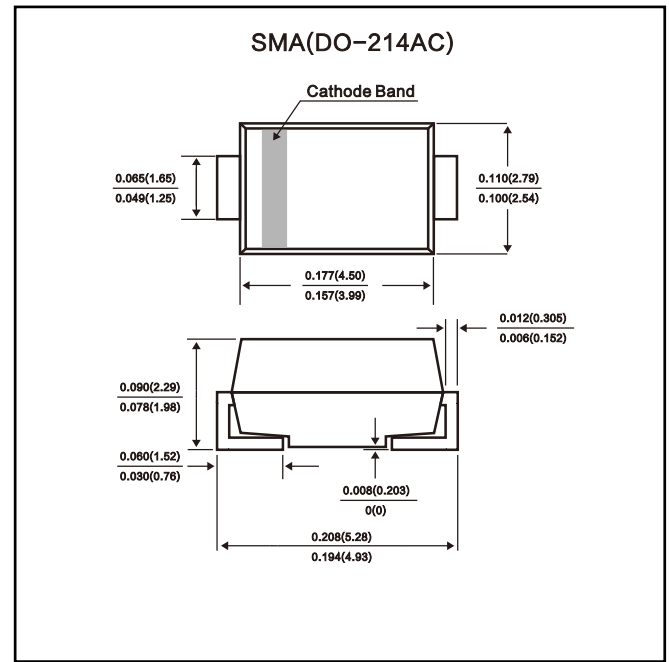


### FEATURES

- High reliability
- Voltage range 10 V to 270 V
- Fits onto 5 mm SMD footpads
- Wave and reflow solderable
- AEC-Q101 qualified
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Power dissipation	$R_{thJA} < 25\text{ K/W}$ , $T_{amb} = 100\text{ }^{\circ}\text{C}$	$P_{tot}$	3000	mW
	$R_{thJA} < 100\text{ K/W}$ , $T_{amb} = 50\text{ }^{\circ}\text{C}$	$P_{tot}$	1250	mW
Non repetitive peak surge power dissipation	$t_p = 100\text{ }\mu\text{s sq.pulse}$ , $T_j = 25\text{ }^{\circ}\text{C}$ prior to surge	$P_{ZSM}$	600	W
Junction to lead		$R_{thJL}$	25	K/W
Junction to ambient air	Mounted on epoxy-glass hard tissue, fig. 1b	$R_{thJA}$	150	K/W
	Mounted on epoxy-glass hard tissue, fig. 1b	$R_{thJA}$	125	K/W
	Mounted on Al-oxid-ceramic ( $\text{Al}_2\text{O}_3$ ), fig. 1b	$R_{thJA}$	100	K/W
Junction temperature		$T_j$	150	$^{\circ}\text{C}$
Storage temperature range		$T_{stg}$	- 65 to + 150	$^{\circ}\text{C}$
Forward voltage (max.)	$I_F = 0.5\text{ A}$	$V_F$	1.2	V

<b>ELECTRICAL CHARACTERISTICS</b> ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)										
PART NUMBER	ZENER VOLTAGE RANGE			TEST CURRENT	REVERSE LEAKAGE CURRENT		DYNAMIC RESISTANCE		TEMPERATURE COEFFICIENT OF ZENER VOLTAGE	
	$V_Z$ at $I_{ZT1}$			$I_{ZT1}$	$I_R$ at $V_R$		$Z_Z$ at $I_{ZT1}$		$TK_{VZ}$ at $I_{ZT1}$	
	V			mA	$\mu\text{A}$	V	$\Omega$		%K	
	MIN.	NOM.	MAX.		MAX.		TYP.	MAX.	MIN.	MAX.
BZG03C10	9.4	10	10.6	50	10	7.5	2	4	0.05	0.09
BZG03C11	10.4	11	11.6	50	4	8.2	4	7	0.05	0.1
BZG03C12	11.4	12	12.7	50	3	9.1	4	7	0.05	0.1
BZG03C13	12.4	13	14.1	50	2	10	5	10	0.05	0.1
BZG03C15	13.8	15	15.6	50	1	11	5	10	0.05	0.1
BZG03C16	15.3	16	17.1	25	1	12	6	15	0.06	0.11
BZG03C18	16.8	18	19.1	25	1	13	6	15	0.06	0.11
BZG03C20	18.8	20	21.2	25	1	15	6	15	0.06	0.11
BZG03C22	20.8	22	23.3	25	1	16	6	15	0.06	0.11
BZG03C24	22.8	24	25.6	25	1	18	7	15	0.06	0.11
BZG03C27	25.1	27	28.9	25	1	20	7	15	0.06	0.11
BZG03C30	28	30	32	25	1	22	8	15	0.06	0.11
BZG03C33	31	33	35	25	1	24	8	15	0.06	0.11
BZG03C36	34	36	38	10	1	27	21	40	0.06	0.11
BZG03C39	37	39	41	10	1	30	21	40	0.06	0.11
BZG03C43	40	43	46	10	1	33	24	45	0.07	0.12
BZG03C47	44	47	50	10	1	36	24	45	0.07	0.12
BZG03C51	48	51	54	10	1	39	25	60	0.07	0.12
BZG03C56	52	56	60	10	1	43	25	60	0.07	0.12
BZG03C62	58	62	66	10	1	47	25	80	0.08	0.13
BZG03C68	64	68	72	10	1	51	25	80	0.08	0.13
BZG03C75	70	75	79	10	1	56	30	100	0.08	0.13
BZG03C82	77	82	87	10	1	62	30	100	0.08	0.13
BZG03C91	85	91	96	5	1	68	60	200	0.09	0.13
BZG03C100	94	100	106	5	1	75	60	200	0.09	0.13
BZG03C110	104	110	116	5	1	82	80	250	0.09	0.13
BZG03C120	114	120	127	5	1	91	80	250	0.09	0.13
BZG03C130	124	130	141	5	1	100	110	300	0.09	0.13
BZG03C150	138	150	156	5	1	110	130	300	0.09	0.13
BZG03C160	158	160	171	5	1	120	150	350	0.09	0.13
BZG03C180	168	180	191	5	1	130	180	400	0.09	0.13
BZG03C200	188	200	212	5	1	150	200	500	0.09	0.13
BZG03C220	208	220	233	2	1	160	350	750	0.09	0.13
BZG03C240	228	240	256	2	1	180	400	850	0.09	0.13
BZG03C270	251	270	289	2	1	200	450	1000	0.09	0.13

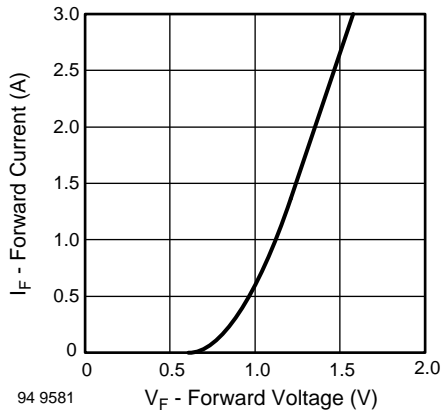


Fig. 1 - Forward Current vs. Forward Voltage

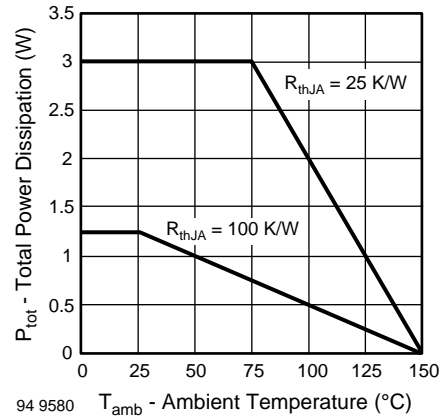


Fig. 2 - Total Power Dissipation vs. Ambient Temperature

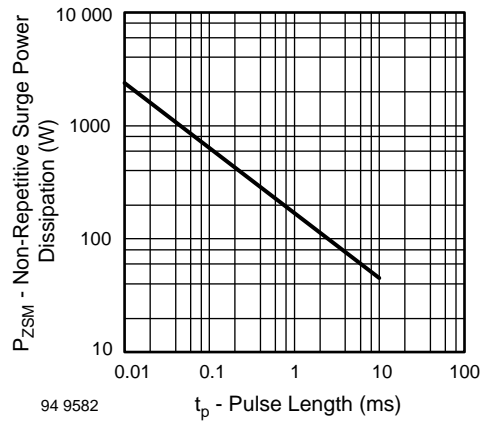


Fig. 3 - Non Repetitive Surge Power Dissipation vs. Pulse Length

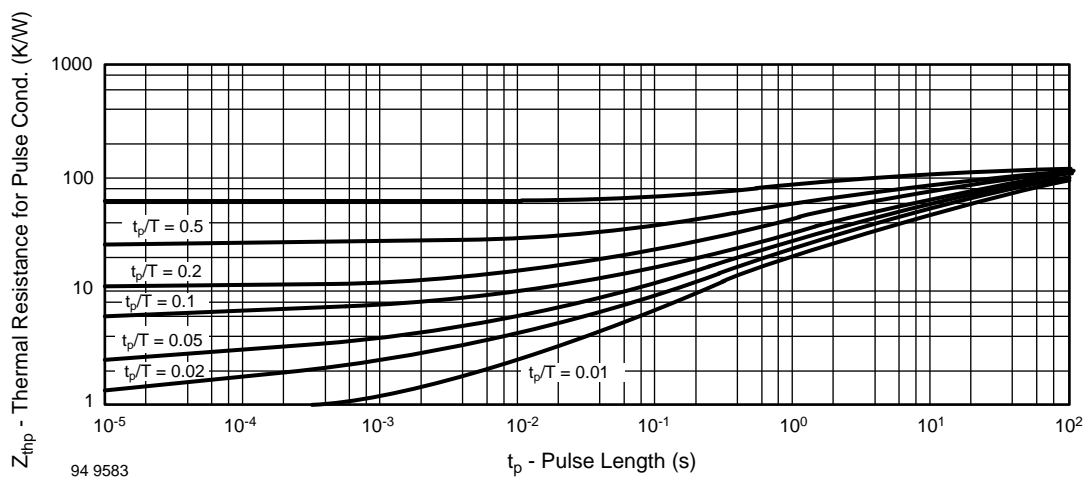


Fig. 4 - Thermal Response