

Silicon Zener Diodes **ZENER**

FEATURES/MECHANICAL DATE

- ◆ Zener shed little electric impedance is low.
- ◆ High reliability.
- ◆ Welding heat resistance: 250°C / 10S, terminal 1.5 mm.
- ◆ Case: Molded plastic.
- ◆ Terminals: Pure tin plated, lead free, solderable per MIL-STD-202, method 208.
- ◆ Polarity: Color band denotes cathode.
- ◆ Mounting position: Any



SMA/DO-214AC

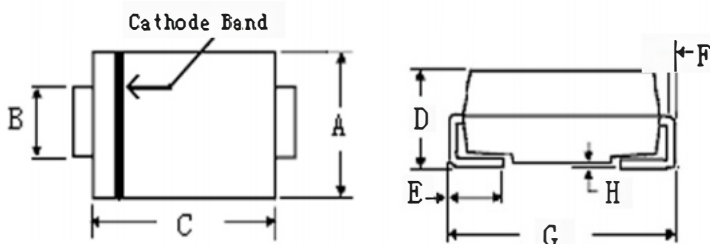
MAXIMUM RATINGS AND CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

PaptNumber	Symbol	Value	Unit
The zener current	I _Z MAX	See table	mA
PowerDissipationRthJA<25K/W,@Ta=100°C	P _t	3.0	W
PowerDissipationRthJA<100K/W,@Ta=50°C	P _t	1.25	W
Thermal impedance	R _θ (ja)	25	°C/W
@ IF=0.5A Forward voltage	V _F	1.2	V
Operating and Storage Temperature Range	T _J , T _{STG}	-55~+150	°C

PRODUCT APPEARANCE SIZE

SMA/DO-214AC



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.096	0.108	2.45	2.75
B	0.049	0.061	1.25	1.55
C	0.171	0.183	4.35	4.65
D	0.075	0.091	1.90	2.30
E	0.031	0.055	0.80	1.40
F	0.005	0.011	0.13	0.27
G	0.191	0.203	4.85	5.15
H		0.008		0.203

ZENER Silicon Zener Diodes

ELECTRICAL CHARACTERISTICS

TYPE	Stand off voltage		Minimum breakdown voltage		Temperature coefficient		Maximum clamping voltage		Typical junction capacitance
	V _R	I _{R(max)}	V _(BR) @I _R		% / K		V _{CL} @I _{PP}	@I _{ZT}	@V _R =0V f=1MHz
	V	μA	V	mA	TYP	Max	V	A	C _J (pF)
BZG04-8V2	8.2	20	9.4	50	0.05	0.09	14.8	20.3	1200
BZG04-9V1	9.1	5	10.4	50	0.05	0.10	15.7	19.1	1100
BZG04-10	10	5	11.4	50	0.05	0.10	17.0	17.7	1000
BZG04-11	11	5	12.4	50	0.05	0.10	18.9	15.9	850
BZG04-12	12	5	13.8	50	0.05	0.10	20.9	14.4	815
BZG04-13	13	5	15.3	25	0.06	0.11	22.9	13.1	785
BZG04-15	15	5	16.8	25	0.06	0.11	25.6	11.7	710
BZG04-16	16	5	18.8	25	0.06	0.11	28.4	10.6	655
BZG04-18	18	5	20.8	25	0.06	0.11	31.0	9.7	610
BZG04-20	20	5	22.8	25	0.06	0.11	33.8	8.9	570
BZG04-22	22	5	25.1	25	0.06	0.11	38.1	7.9	545
BZG04-24	24	5	28	25	0.06	0.11	42.2	7.1	505
BZG04-27	27	5	31	25	0.06	0.11	46.2	6.5	475
BZG04-30	30	5	34	10	0.06	0.11	50.1	6.0	450
BZG04-33	33	5	37	10	0.06	0.11	54.1	5.5	420
BZG04-36	36	5	40	10	0.07	0.12	60.7	4.9	390
BZG04-39	39	5	44	10	0.07	0.12	65.5	4.6	370
BZG04-43	43	5	48	10	0.07	0.12	70.8	4.2	350
BZG04-47	47	5	52	10	0.07	0.12	78.6	3.8	330
BZG04-51	51	5	58	10	0.08	0.13	86.5	3.5	310
BZG04-56	56	5	64	10	0.08	0.13	94.4	3.2	291
BZG04-62	62	5	70	10	0.08	0.13	103.5	2.9	280
BZG04-68	68	5	77	10	0.08	0.13	114	2.6	275
BZG04-75	75	5	85	5	0.09	0.13	126	2.4	260
BZG04-82	82	5	94	5	0.09	0.13	139	2.2	250
BZG04-91	91	5	104	5	0.09	0.13	152	2.0	243
BZG04-100	100	5	114	5	0.09	0.13	167	1.8	170
BZG04-110	110	5	124	5	0.09	0.13	185	1.6	153
BZG04-120	120	5	138	5	0.09	0.13	204	1.5	150
BZG04-130	130	5	153	5	0.09	0.13	224	1.3	145
BZG04-150	150	5	168	5	0.09	0.13	249	1.2	140
BZG04-160	160	5	188	5	0.09	0.13	276	1.1	135
BZG04-180	180	5	208	2	0.09	0.13	305	1.0	131
BZG04-200	200	5	228	2	0.09	0.13	336	0.9	122
BZG04-220	220	5	251	2	0.09	0.13	380	0.8	120

RATINGS AND CHARACTERISTIC CURVES

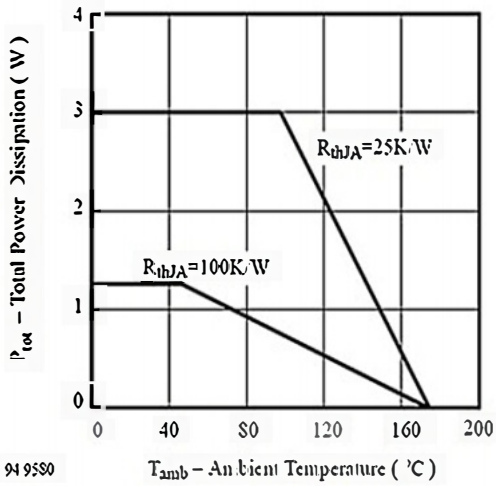


Figure 1. Total Power Dissipation vs. Ambient Temperature

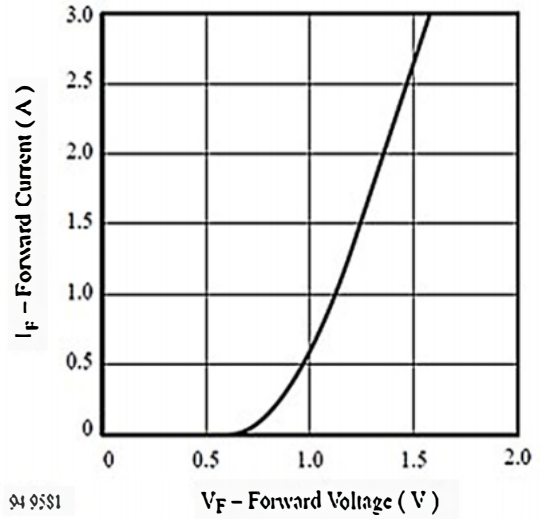


Figure 2. Forward Current vs. Forward Voltage