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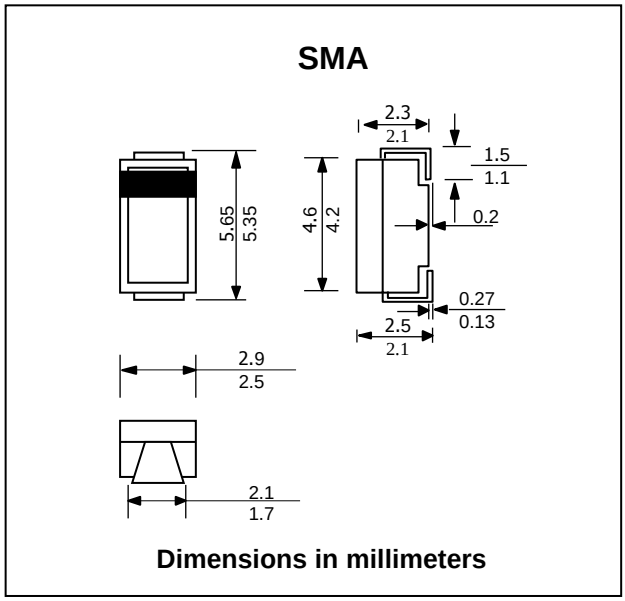
BZG04- Series

ZENER DIODES



FEATURES :

* High reliability
* Stand-off Voltage range 8.2 V to 220 V
* Excellent clamping cabability
* Fast respon time (typ. ≤ 1ps form 0 to V_{Zmin})
* Low leakage current
* Pb / RoHS Free

MECHANICAL DATA :

* Case : SMA Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.060 gram (Approximately)

MAXIMUM RATINGS

Rating at 25 °C ambient temperature unless otherwise specified

Parameter	Condition	Symbol	VALUE	Unit
Power dissipation	R_{thJA} < 25 K/W, T_{amb} = 100 °C	P_{diss}	3	W
	R_{thJA} < 100 K/W, T_{amb} = 50 °C	P_{diss}	1.25	W
Non repetitive peak surge power dissipation	tp = 10/1000 µs; square pulse; Tj = 25°C prior to surge	P_{ZSM}	300	W
Peak forward surge current	10 ms single half sine wave	I_{FSM}	50	A
Forward voltage	I_F = 0.5 A	V_F	1.2	V
Thermal resistance from junction to lead		R_{thJL}	30	K/W
Junction Temperature Range		T_j	150	°C
Storage Temperature Range		T_{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type No.	Standoff Voltage		Min. Breakdown Voltage		T_{KVZ} @ I_R		Max. Clamping Voltage		Typical Junction Capacitance
	V_R	$I_{R(max)}$	$V_{(BR)}$ @ I_R		(% / K)		$V_{CL(R)}$ @ I_{PP}	@ I_{ZT}	Cj @ VR = 0 V, f = 1MHz
	V	(µA)	V	mA	typ	Max	V(1)	A(1)	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	0.11	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

Note : (1) 10/1000 µs pulse.