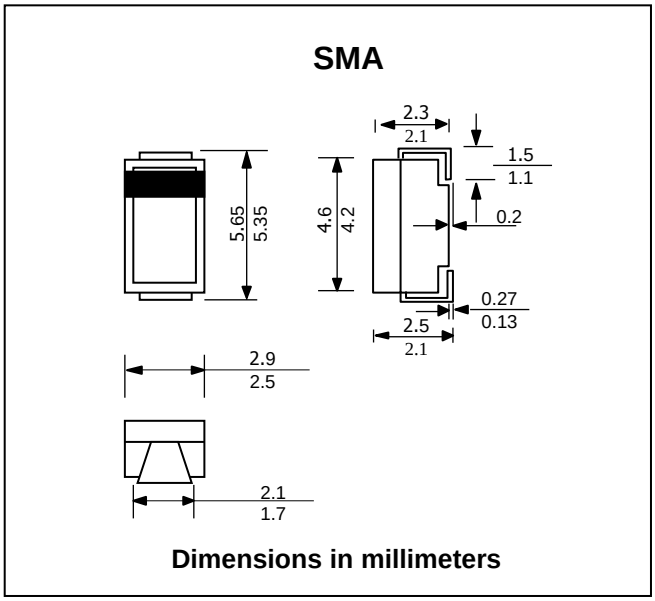
BZG05C Series

ZENER DIODES



FEATURES :

* Glass passivated junction
* High reliability
* Voltage range 3.3 V to 100 V
* 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} < 30 K/W, T_{amb} = 60 °C	P_{diss}	3	W
	R_{thJA} < 100 K/W, T_{amb} = 25 °C	P_{diss}	1.25	W
Non repetitive peak surge power dissipation	tp = 100 µs; square pulse; Tj = 25°C prior to surge	P_{ZSM}	60	W
Forward voltage	I_F = 0.2 A	V_F	1.2	V
Junction Temperature Range		T_j	150	°C
Storage Temperature Range		T_{stg}	-65 to +150	°C
Thermal resistance from junction to lead		R_{thJL}	30	K/W

ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified

Type No.	Zener Voltage V_Z @ I_{ZT}			Test Current	Maximum Dynamic Resistance		Test Current	Temp. coefficient of Zener Voltage @I_{ZT}		Maximum Reverse Leakage Current	Reverse Voltage
					r_{zjT} @	r_{zjK} @					
	Min	typ	Max	I_{ZT}	I_{ZK}	I_{ZK}	I_{ZK}	(% / K)			V_R
	(V)	(V)	(V)	(mA)	(Ω)	(Ω)	(mA)	Min	Max	I_R (μA)	V
BZG05C3V3	3.1	3.3	3.5	80	20	400	1.0	-0.08	0.05	40	1
BZG05C3V6	3.4	3.6	3.8	60	20	500	1.0	-0.08	-0.05	20	1
BZG05C3V9	3.7	3.9	4.1	60	15	500	1.0	-0.07	-0.02	10	1
BZG05C4V3	4.0	4.3	4.6	50	13	500	1.0	-0.07	-0.01	3	1
BZG05C4V7	4.4	4.7	5.0	45	13	600	1.0	-0.03	0.040	3	1
BZG05C5V1	4.8	5.1	5.4	45	10	500	1.0	-0.01	0.040	1	1.5
BZG05C5V6	5.2	5.6	6.0	45	7	400	1.0	0	0.045	1	2
BZG05C6V2	5.8	6.2	6.6	35	4	300	1.0	0.010	0.055	1	3
BZG05C6V8	6.4	6.8	7.2	35	3.5	300	1.0	0.015	0.060	1	4
BZG05C7V5	7.0	7.5	7.9	35	3	200	0.5	0.020	0.065	1	4.5
BZG05C8V2	7.7	8.2	8.7	25	5	200	0.5	0.030	0.070	1	6.2
BZG05C9V1	8.5	9.1	9.6	25	5	200	0.5	0.035	0.075	1	6.8
BZG05C10	9.4	10	10.6	25	7	200	0.5	0.040	0.080	0.5	7
BZG05C11	10.4	11	11.6	20	8	300	0.5	0.045	0.080	0.5	8.2
BZG05C12	11.4	12	12.7	20	9	350	0.5	0.045	0.085	0.5	9.1
BZG05C13	12.4	13	14.1	20	10	400	0.5	0.050	0.085	0.5	10
BZG05C15	13.8	15	15.6	15	15	500	0.5	0.055	0.090	0.5	11
BZG05C16	15.3	16	17.1	15	15	500	0.5	0.055	0.090	0.5	12
BZG05C18	16.8	18	19.1	15	20	500	0.5	0.060	0.090	0.5	13
BZG05C20	18.8	20	21.2	10	24	600	0.5	0.060	0.090	0.5	15
BZG05C22	20.8	22	23.3	10	25	600	0.5	0.060	0.095	0.5	16
BZG05C24	22.8	24	25.6	10	25	600	0.5	0.060	0.095	0.5	18
BZG05C27	25.1	27	28.9	8	30	750	0.25	0.060	0.095	0.5	20
BZG05C30	28	30	32	8	30	1000	0.25	0.060	0.095	0.5	22
BZG05C33	31	33	35	8	35	1000	0.25	0.060	0.095	0.5	24
BZG05C36	34	36	38	8	40	1000	0.25	0.060	0.095	0.5	27
BZG05C39	37	39	41	6	50	1000	0.25	0.060	0.095	0.5	30
BZG05C43	40	43	46	6	50	1000	0.25	0.060	0.095	0.5	33
BZG05C47	44	47	50	4	90	1500	0.25	0.060	0.095	0.5	36
BZG05C51	48	51	54	4	115	1500	0.25	0.060	0.095	0.5	39
BZG05C56	52	56	60	4	120	2000	0.25	0.060	0.095	0.5	43
BZG05C62	58	62	66	4	125	2000	0.25	0.060	0.095	0.5	47
BZG05C68	64	68	72	4	130	2000	0.25	0.060	0.095	0.5	51
BZG05C75	70	75	79	4	135	2000	0.25	0.060	0.095	0.5	56
BZG05C82	77	82	87	2.7	200	3000	0.25	0.060	0.095	0.5	62
BZG05C91	85	91	96	2.7	250	3000	0.25	0.060	0.095	0.5	68