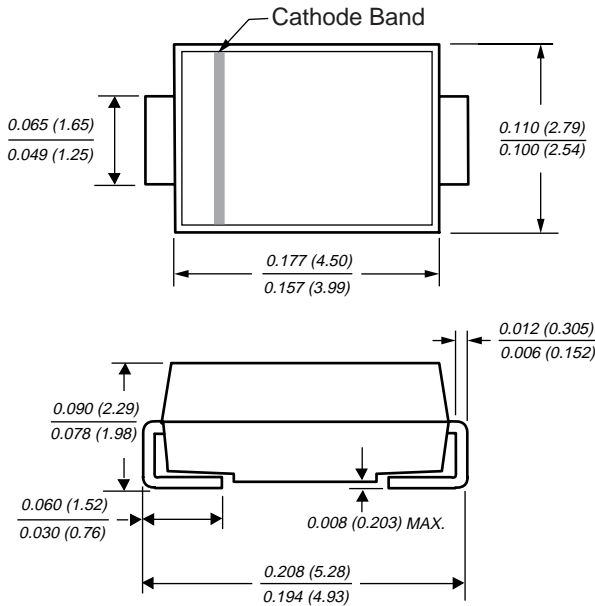




Surface Mount Glass Passivated Zeners

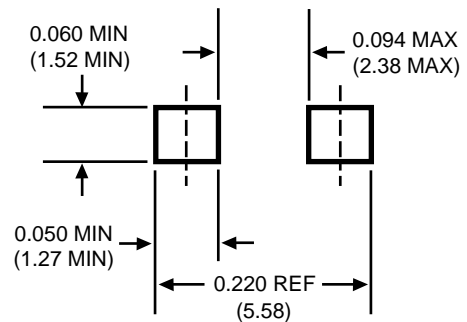
Zener Voltage 3.3 to 15V
Steady State Power 1.25W

DO-214AC (SMA)



Dimensions in inches and (millimeters)

Mounting Pad Layout



Mechanical Data

Case: JEDEC DO-214AC molded plastic over passivated junction

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

High temperature soldering guaranteed: 250°C/10 seconds at terminals

Polarity: Color band denotes positive end (cathode)

Mounting Position: Any **Weight:** 0.002oz., 0.064g

Packaging Codes – Options (Antistatic):

- 2P – 1.8K per 7" plastic Reel (12mm tape), 36K/carton
- 2Q – 7.5K per 13" plastic Reel (12mm tape), 75K/carton

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Planar, oxide passivated chip junction

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Power Dissipation ⁽¹⁾	P _{tot}	1.25	W
Non repetitive peak surge power dissipation ⁽²⁾	P _{ZSM}	60	W
Maximum junction temperature	T _J	150	°C
Storage temperature range	T _{stg}	-65 to +150	°C
Typical thermal resistance junction to lead	R _{θJL}	30	°C/W
Maximum thermal resistance junction to ambient ⁽¹⁾	R _{θJA}	100	°C/W

Notes: (1) Mounted on aluminum-oxide substrate
(2) t_p=100µs sq. pulse, T_J=25°C prior to surge

BZG05C Series

Vishay Semiconductors
formerly General Semiconductor



Electrical Characteristics (T_A = 25°C unless otherwise noted) Maximum V_F = 1.2V at I_F = 0.2A

Type	Marking Code	V _Z at I _{ZT} (V)		r _{Zj} at I _{ZT} (Ω)	C _{VZ} at I _{ZT} (%/°C)		I _{ZT} (mA)	r _{Zk} (Ω)	I _{Zk} (mA)	I _R (μA)	V _R (V)
		Min	Max	Max	Typ	Max		Max		Max	
BZG05C3V3	GA	3.1	3.5	25	-0.08	-0.05	80	500	1	40	1
BZG05C3V6	GB	3.4	3.8	25	-0.08	-0.05	60	500	1	20	1
BZG05C3V9	GC	3.7	4.1	20	-0.07	-0.02	60	500	1	10	1
BZG05C4V3	GD	4.0	4.6	15	-0.07	-0.01	50	500	1	3	1
BZG05C4V7	GE	4.4	5.0	15	-0.03	0.04	45	500	1	3	1
BZG05C5V1	GF	4.8	5.4	15	-0.01	0.04	45	500	1	1	1.5
BZG05C5V6	GG	5.2	6.0	10	0.00	0.05	45	400	1	1	2
BZG05C6V2	GH	5.8	6.6	5	0.01	0.06	35	300	1	1	3
BZG05C6V8	GI	6.4	7.2	4	0.02	0.06	35	300	1	1	4
BZG05C7V5	GJ	7.4	7.9	3.5	0.02	0.07	35	200	0.5	1	4.5
BZG05C8V2	GK	7.7	8.7	6	0.03	0.07	25	200	0.5	1	6.2
BZG05C9V1	GL	8.5	9.6	6	0.04	0.08	25	200	0.5	1	6.8
BZG05C10	GM	9.4	10.6	8	0.04	0.08	25	200	0.5	0.5	7.5
BZG05C11	GN	10.4	11.6	10	0.05	0.08	20	300	0.5	0.5	8.2
BZG05C12	GO	11.4	12.7	10	0.05	0.09	20	350	0.5	0.5	9.1
BZG05C13	GP	12.4	14.1	12	0.05	0.09	20	400	0.5	0.5	10
BZG05C15	GQ	13.8	15.6	20	0.06	0.09	15	500	0.5	0.5	11