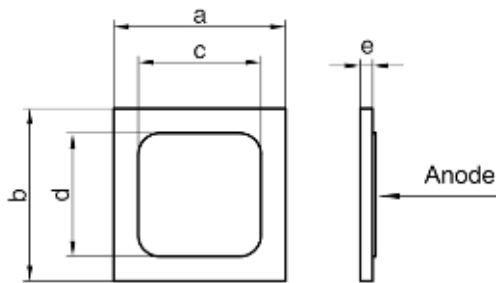




# Small Signal Zener Diodes

## Wire Bondable, Epoxy Attach Bare Die



a = .013 in b = .013 in c = .006 in  
d = .006 in e = .007 in

FEATURES	
<ul style="list-style-type: none"> <li>• Wafer fab by Vishay Semiconductor</li> <li>• Silicon planar Zener diode</li> </ul>	
MECHANICAL DATA	
Top Metal ( Anode )	AlSi
Back Metal ( Cathode )	AuSb
Passivation	Nitride

### THERMAL CHARACTERISTICS

Parameter:	Symbol:	Value:	Unit
Junction Temperature (max)	T <sub>J</sub>	+175	°C
Operating Temperature Range	T <sub>OP</sub>	-55 to +175	°C
Storage Temperature Range	T <sub>S</sub>	-55 to +175	°C

### DEVICE CODE

1N5728	B	E	B	D
Base Part Number	Zener Tolerance	Bottom Side Attach Method	Top Side Connection Method	Form
1N5728 – 1N5757	"No Suffix" = 20% "A" = 10% "B" = 5% "C" = 2%	Epoxy Die Attach	Wire Bondable	D = Die





**ELECTRICAL CHARACTERISTICS ( T<sub>amb</sub> = +25 °C unless otherwise noted. )**

Part Number (Note 1)	Nominal Zener Voltage	Zener Test Current	Dynamic Impedance	Maximum Reverse Current		Maximum Zener Current	Typical Temp. Coeff. Of Zener Voltage
	V <sub>Z</sub> @ I <sub>ZT</sub>	I <sub>ZT</sub>	Z <sub>Z</sub> @ I <sub>ZT</sub>	IR	VR	I <sub>ZM</sub>	αV <sub>Z</sub>
	(Volts)	(mA)	(Ω)	(uA)	(Volts)	(mA)	mV/°C
1N5728B	4.7	10	70	3	2	70	-1.0
1N5729B	5.1	10	50	3	2	65	-0.2
1N5730B	5.6	10	25	3	2	60	+1.2
1N5731B	6.2	10	10	3	4	55	+2.3
1N5732B	6.8	10	10	2	4	50	+30.
1N5733B	7.5	10	10	1	5	45	+4.0
1N5734B	8.2	10	15	0.5	5	40	+5.0
1N5735B	9.1	10	15	0.2	6	40	+6.0
1N5736B	10	10	20	0.1	7	35	+7.0
1N5737B	11	5	20	0.1	8	30	+8.0
1N5738B	12	5	25	0.1	8	30	+9.0
1N5739B	13	5	30	0.1	9	25	+10.5
1N5740B	15	5	30	0.1	10	25	+12.9
1N5741B	16	5	40	0.1	11	20	+13
1N5742B	18	5	45	0.1	12	20	+15
1N5743B	20	5	55	0.1	14	15	+17
1N5744B	22	5	55	0.1	15	15	+19
1N5745B	24	5	70	0.1	17	15	+21
1N5746B	27	2	80	0.1	19	10	+23.5
1N5747B	30	2	80	0.1	21	10	+26
1N5748B	33	2	90	0.1	23	10	+29
1N5749B	36	2	90	0.1	25	10	+31
1N5750B	39	2	130	0.1	27	9	+34
1N5751B	43	2	150	0.1	30	9	+37
1N5752B	47	2	170	0.1	33	8	+40
1N5753B	51	2	180	0.1	36	7	+44
1N5754B	56	2	200	0.1	39	6	+47
1N5755B	62	2	215	0.1	43	6	+51
1N5756B	68	2	240	0.1	48	5	+56
1N5757B	75	2	255	0.1	53	5	+60

**Note 1.** No Suffix indicates 20% Tolerance, "A" Suffix indicates 10% Tolerance, "B" Suffix shown indicates 5% Tolerance and "C" Suffix indicates 2% Tolerance.

