

GS3EZ3.9D thru GS3EZ400D

Silicon Planar Zener Diodes

Vz Range: 3.9V to 400V Power Dissipation: 3W

Features

- High reliability chips, low zener impedance at low current
- Maximum power dissipation of 3W is ideally suited for stabilized power supply, etc.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Zener voltage tolerance is ±5%

Mechanical Data

- Case: DO-204AL (DO-41)
- Terminals: Solder plated
- Polarity: Color band denotes cathode end



DO-204AL (DO-41)

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbols	Value	Units
Power Dissipation	P _D	3	W
Max. Thermal Resistance Junction to Ambient	R _{θJA}	100	°C/W
Max. Thermal Resistance Junction to Lead	R _{θJL}	25	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified)

MPN	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V _Z @ I _{ZT}	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(uA)	(V)	(mA)
GS3EZ3.9D	3.9	192	4.5	400	1.0	80	1.0	630
GS3EZ4.3D	4.3	174	4.5	400	1.0	30	1.0	590
GS3EZ4.7D	4.7	160	4.0	500	1.0	20	1.0	550
GS3EZ5.1D	5.1	147	3.5	550	1.0	5.0	1.0	520
GS3EZ5.6D	5.6	134	2.5	600	1.0	5.0	2.0	480
GS3EZ6.2D	6.2	121	1.5	700	1.0	5.0	3.0	435
GS3EZ6.8D	6.8	110	2.0	700	1.0	50	4.0	393
GS3EZ7.5D	7.5	100	2.0	700	0.5	50	5.0	360
GS3EZ8.2D	8.2	91	2.3	700	0.5	50	6.0	330
GS3EZ9.1D	9.1	82	2.5	700	0.5	50	7.0	297

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	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
GS3EZ10D	10	75	3.5	700	0.25	50	7.6	270
GS3EZ11D	11	68	4.0	700	0.25	50	8.4	225
GS3EZ12D	12	63	4.5	700	0.25	1.0	9.1	246
GS3EZ13D	13	58	4.5	700	0.25	0.5	9.9	208
GS3EZ14D	14	53	5.0	700	0.25	0.5	10.6	193
GS3EZ15D	15	50	5.5	700	0.25	0.5	11.4	180
GS3EZ16D	16	47	5.5	700	0.25	0.5	12.2	169
GS3EZ17D	17	44	6.0	750	0.25	0.5	13.0	159
GS3EZ18D	18	42	6.0	750	0.25	0.5	13.7	150
GS3EZ19D	19	40	7.0	750	0.25	0.5	14.4	142
GS3EZ20D	20	37	7.0	750	0.25	0.5	15.2	135
GS3EZ22D	22	34	8.0	750	0.25	0.5	16.7	123
GS3EZ24D	24	31	9.0	750	0.25	0.5	18.2	112
GS3EZ27D	27	28	10	750	0.25	0.5	20.6	100
GS3EZ28D	28	27	12	750	0.25	0.5	21.0	96
GS3EZ30D	30	25	16	1000	0.25	0.5	22.5	90
GS3EZ33D	33	23	20	1000	0.25	0.5	25.1	82
GS3EZ36D	36	21	22	1000	0.25	0.5	27.4	75
GS3EZ39D	39	19	28	1000	0.25	0.5	29.7	69
GS3EZ43D	43	17	33	1500	0.25	0.5	32.7	63
GS3EZ47D	47	16	38	1500	0.25	0.5	35.6	57
GS3EZ51D	51	15	45	1500	0.25	0.5	38.8	53
GS3EZ56D	56	13	50	2000	0.25	0.5	42.6	48
GS3EZ62D	62	12	55	2000	0.25	0.5	47.1	44
GS3EZ68D	68	11	70	2000	0.25	0.5	51.7	40
GS3EZ75D	75	10	85	2000	0.25	0.5	56.0	36
GS3EZ82D	82	9.1	95	3000	0.25	0.5	62.2	33
GS3EZ91D	91	8.2	115	3000	0.25	0.5	69.2	30
GS3EZ100D	100	7.5	160	3000	0.25	0.5	76.0	27
GS3EZ110D	110	6.8	225	4000	0.25	0.5	83.6	25
GS3EZ120D	120	6.3	300	4500	0.25	0.5	91.2	22
GS3EZ130D	130	5.8	375	5000	0.25	0.5	98.8	21
GS3EZ140D	140	5.3	475	5000	0.25	0.5	106.4	19
GS3EZ150D	150	5.0	550	6000	0.25	0.5	114.0	18
GS3EZ160D	160	4.7	625	6500	0.25	0.5	121.6	17
GS3EZ170D	170	4.4	650	7000	0.25	0.5	130.4	16
GS3EZ180D	180	4.2	700	7000	0.25	0.5	136.8	15
GS3EZ190D	190	4.0	800	8000	0.25	0.5	144.8	14
GS3EZ200D	200	3.7	875	8000	0.25	0.5	152.0	13

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	(V)	(mA)	(Ω)	(Ω)	(mA)	(uA)	(V)	(mA)
GS3EZ220D	220	3.4	1600	9000	0.25	1	167.0	12
GS3EZ240D	240	3.1	1700	9000	0.25	1	182.0	11
GS3EZ270D	270	2.8	1800	9000	0.25	1	205.0	10
GS3EZ300D	300	2.5	1900	9000	0.25	1	228.0	9
GS3EZ330D	330	2.3	2200	9000	0.25	1	251.0	8
GS3EZ360D	360	2.1	2700	9000	0.25	1	274.0	8
GS3EZ400D	400	1.9	3500	9000	0.25	1	304.0	7

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Typical Characteristics Curves

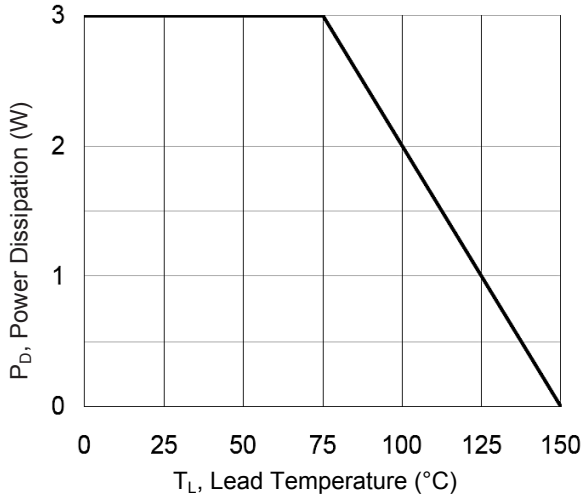


Figure 1. Steady State Power Derating Curve

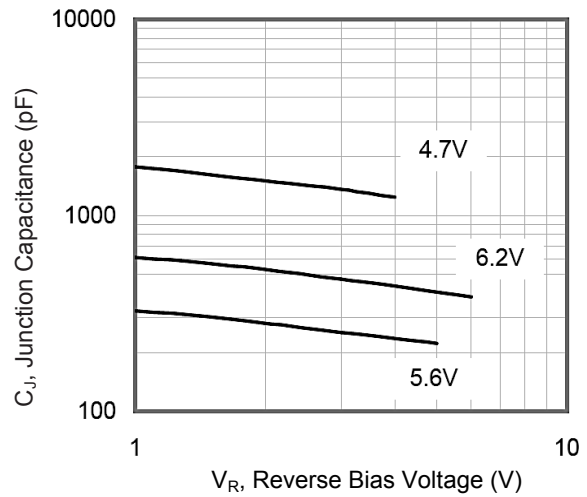


Figure 2. Typical Junction Capacitance

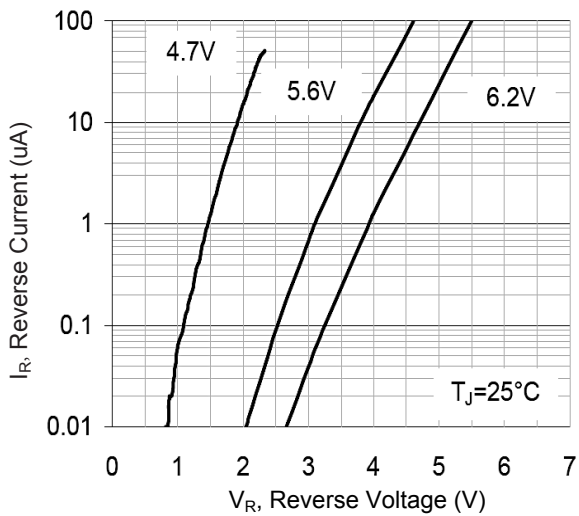


Figure 3. Typical Leakage Characteristics

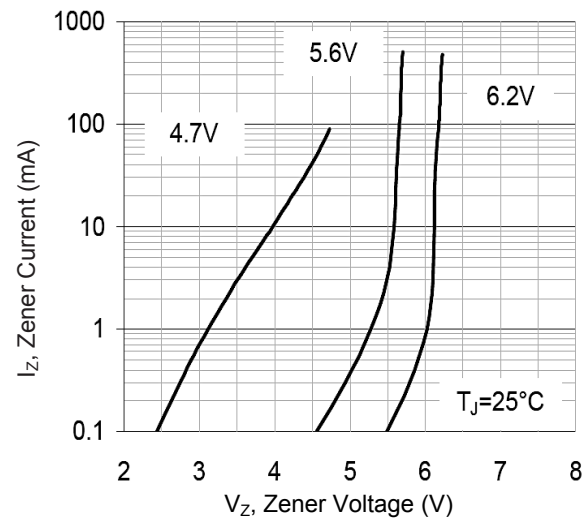


Figure 4. Typical Zener Characteristics

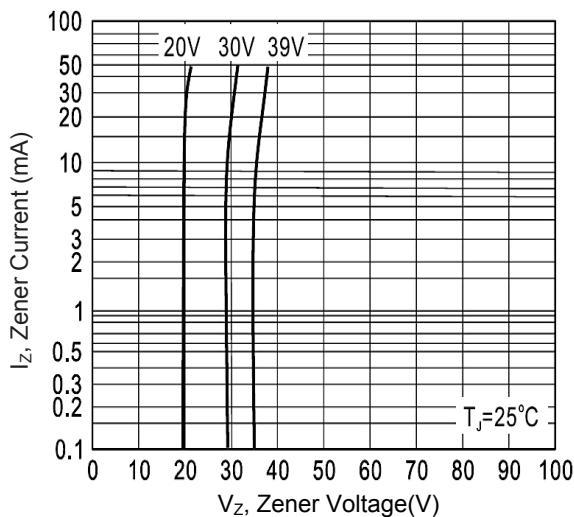


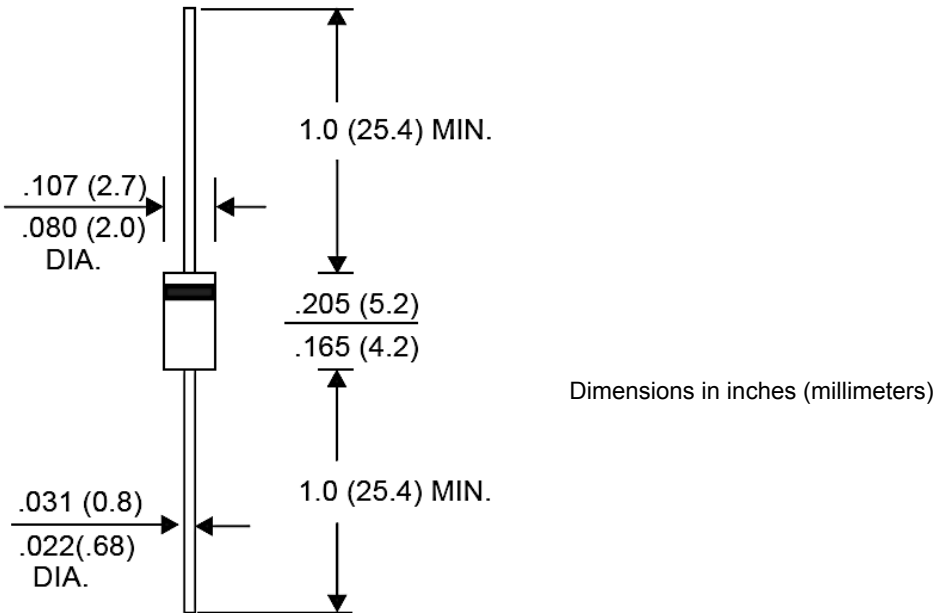
Figure 5. Typical Zener Characteristics

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Package Outline Dimensions DO-204AL (DO-41)



Order Information

Device	Package	Packaging	SPQ
GS3EZxxD	DO-204AL (DO-41)	Tape & Reel	5,000 Pcs / Reel