

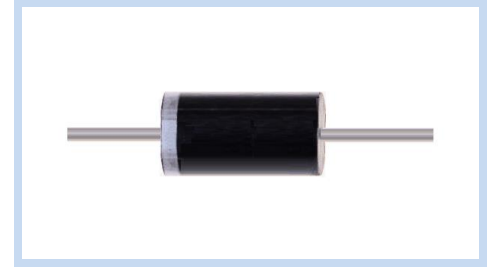
Zener Diodes DO-41 Axial Leaded

1N59-B Series

MERITEK

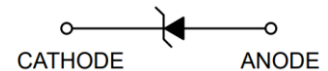
FEATURE

- Zener Voltage Range: 3.3V to 200V
- Power Dissipation: 1.5W
- Zener Voltage Tolerance $\pm 5\%$
- Glass Passivated Chip
- Low Inductance
- Application: Power Management Systems, Voltage Regulation



MECHANICAL DATA

- Case: DO-41, Molded Plastic
- Flammability Classification Rating UL 94V-0
- Solderable Per MIL-STD-202, Method 208



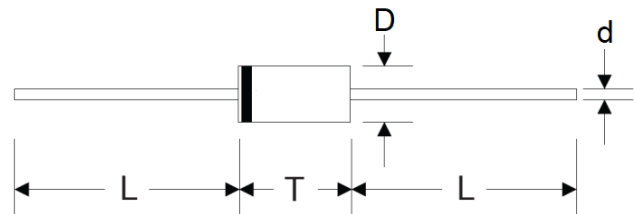
MAXIMUM RATINGS

Parameter	Symbols	Value	Unit
DC Power Dissipation at $T_L=75^\circ\text{C}$	P_D	1.5	W
Forward Voltage at $I_F=200\text{mA}$	V_F	1.5	V
Junction Temperature Range	T_J	-55~+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^\circ\text{C}$

Note: $T_A=25^\circ\text{C}$ unless otherwise noted

DIMENSIONS

Item	DO-41	
	Min (mm)	Max (mm)
L	25.40	-
T	4.20	5.20
d	2.00	3.00
S	0.70	0.90



ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage		Max\Zener Impedance			Max Reverse Leakage Current		Max DC Zener Current
	V_Z at I_{ZT}	I_{ZT}	Z_{ZT} at I_{ZT}	Z_{ZK} at I_{ZK}	I_{ZK}	I_R at V_R		I_{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
1N5913B	3.3	113.6	10.0	500	1.00	100	1.0	454
1N5914B	3.6	104.2	9.0	500	1.00	75	1.0	416
1N5915B	3.9	96.1	7.5	500	1.00	25	1.0	384
1N5916B	4.3	87.2	6.0	500	1.00	5.0	1.0	348
1N5917B	4.7	79.8	5.0	500	1.00	5.0	1.5	319
1N5918B	5.1	73.5	4.0	350	1.00	5.0	2.0	294
1N5919B	5.6	66.9	2.0	250	1.00	5.0	3.0	267
1N5920B	6.2	60.5	2.0	200	1.00	2.5	4.0	240

Zener Diodes DO-41 Axial Leaded

1N59-B Series

MERITEK

ELECTRICAL CHARACTERISTICS

Part Number	Nominal Zener Voltage		Max Zener Impedance			Max Reverse Leakage Current		Max DC Zener Current
	V _Z at I _{ZT}	I _{ZT}	Z _{ZT} at I _{ZT}	Z _{ZK} at I _{ZK}	I _{ZK}	I _R at V _R		I _{ZM}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
1N5921B	6.8	55.1	2.5	200	1.00	2.5	5.2	220
1N5922B	7.5	50.0	3.0	400	0.50	2.5	6.0	200
1N5923B	8.2	45.7	3.5	400	0.50	2.5	6.5	182
1N5924B	9.1	41.2	4.0	500	0.50	2.5	7.0	164
1N5925B	10	37.5	4.5	500	0.25	2.5	8.0	150
1N5926B	11	34.1	5.5	550	0.25	0.5	8.4	136
1N5927B	12	31.2	6.5	550	0.25	0.5	9.1	125
1N5928B	13	28.8	7.0	550	0.25	0.5	9.9	115
1N5929B	15	25.0	9.0	600	0.25	0.5	11.4	100
1N5930B	16	23.4	10.0	600	0.25	0.5	12.2	93
1N5931B	18	20.8	12.0	650	0.25	0.5	13.7	83
1N5932B	20	18.7	14.0	650	0.25	0.5	15.2	75
1N5933B	22	17.0	17.5	650	0.25	0.5	16.7	68
1N5934B	24	15.6	19	700	0.25	0.5	18.2	62
1N5935B	27	13.9	23	700	0.25	0.5	20.6	55
1N5936B	30	12.5	26	750	0.25	0.5	22.8	50
1N5937B	33	11.4	33	800	0.25	0.5	25.1	45
1N5938B	36	10.4	38	850	0.25	0.5	27.4	41
1N5939B	39	9.6	45	900	0.25	0.5	29.7	38
1N5940B	43	8.7	53	950	0.25	0.5	32.7	34
1N5941B	47	8.0	67	1000	0.25	0.5	35.8	31
1N5942B	51	7.3	70	1100	0.25	0.5	38.8	29
1N5943B	56	6.7	86	1300	0.25	0.5	42.6	26
1N5944B	62	6.0	100	1500	0.25	0.5	47.1	24
1N5945B	68	5.5	120	1700	0.25	0.5	51.7	22
1N5946B	75	5.0	140	2000	0.25	0.5	56.0	20
1N5947B	82	4.6	160	2500	0.25	0.5	62.2	18
1N5948B	91	4.1	200	3000	0.25	0.5	69.2	16
1N5949B	100	3.7	250	3100	0.25	0.5	76.0	15
1N5950B	110	3.4	300	4000	0.25	0.5	83.6	13
1N5951B	120	3.1	380	4500	0.25	0.5	91.2	12
1N5952B	130	2.9	450	5000	0.25	0.5	98.0	11
1N5953B	150	2.5	600	6000	0.25	0.5	114.0	10
1N5954B	160	2.3	700	6500	0.25	0.5	121.6	9
1N5955B	180	2.1	900	7000	0.25	0.5	136.8	8
1N5956B	200	1.9	1900	8000	0.25	0.5	152.0	7

Note:

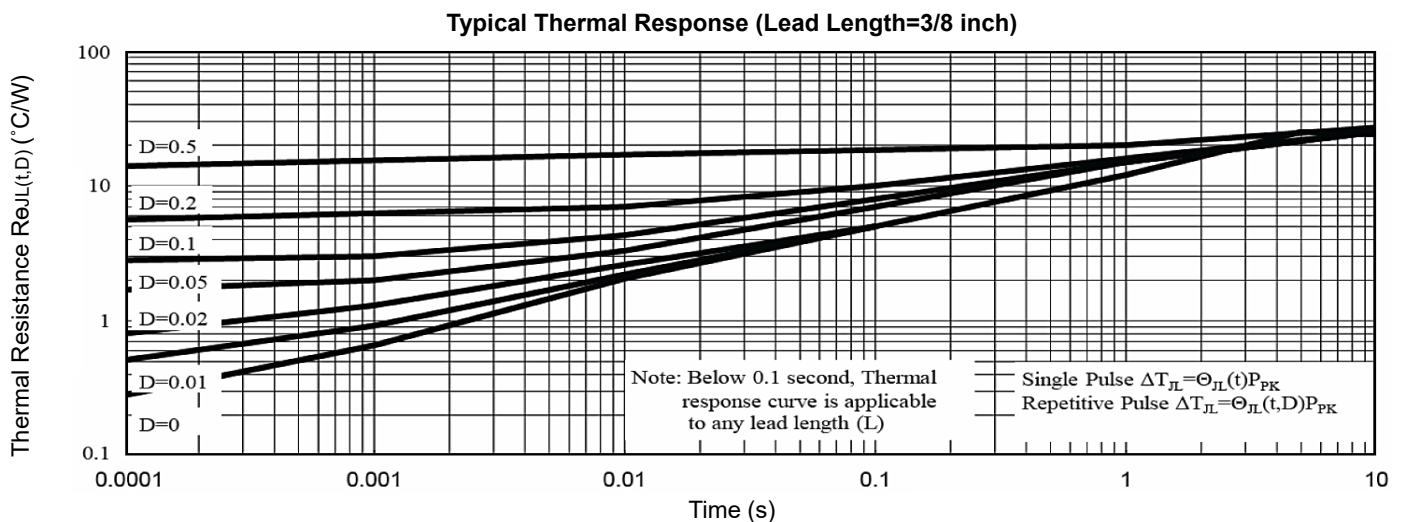
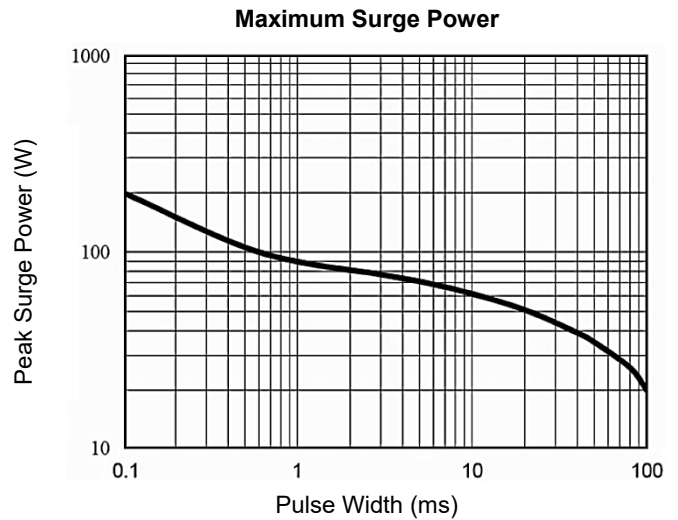
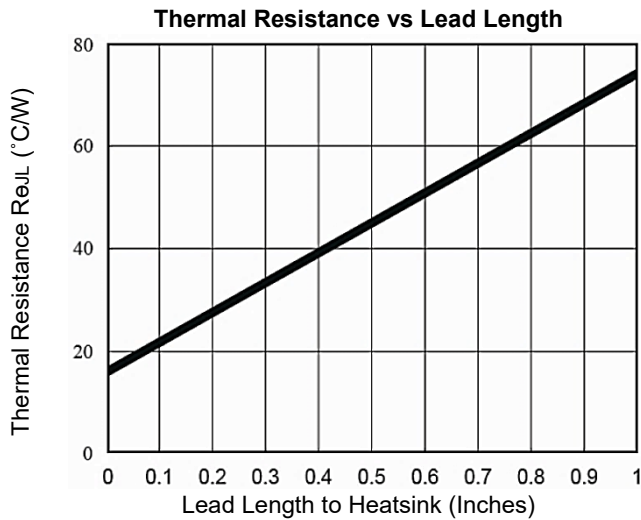
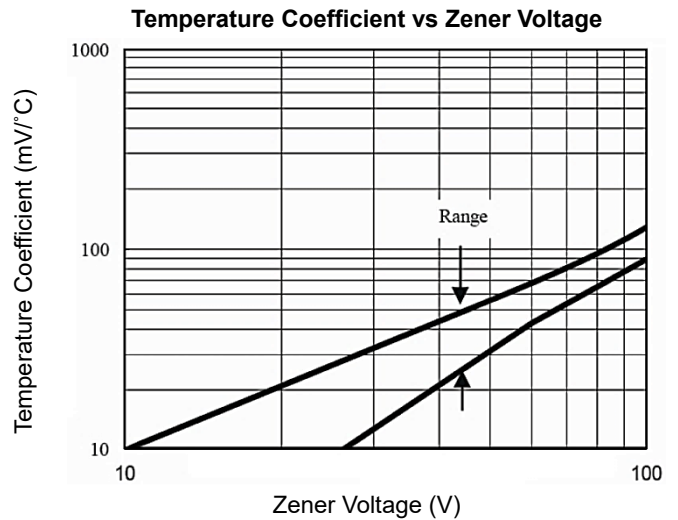
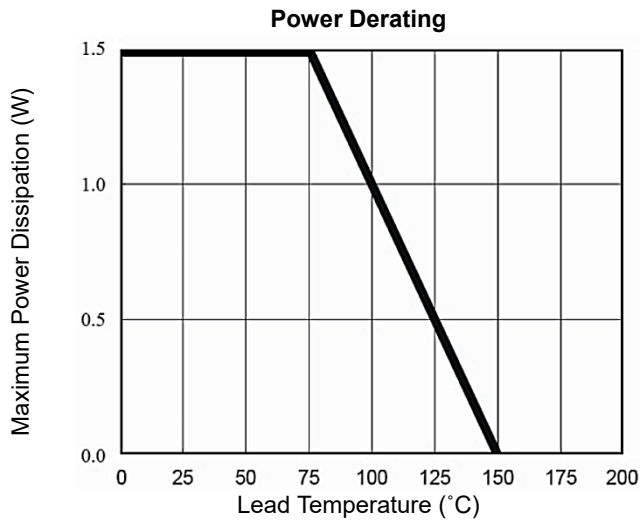
1. T_A = 25°C unless otherwise noted
2. The type number listed have a standard tolerance on the nominal zener voltage of ±5%.
3. The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC method

Zener Diodes DO-41 Axial Leaded

1N59-B Series

MERITEK

CHARACTERISTIC CURVES



*Specifications subject to change without notice.