

V_Z: 3.3 to 330 V

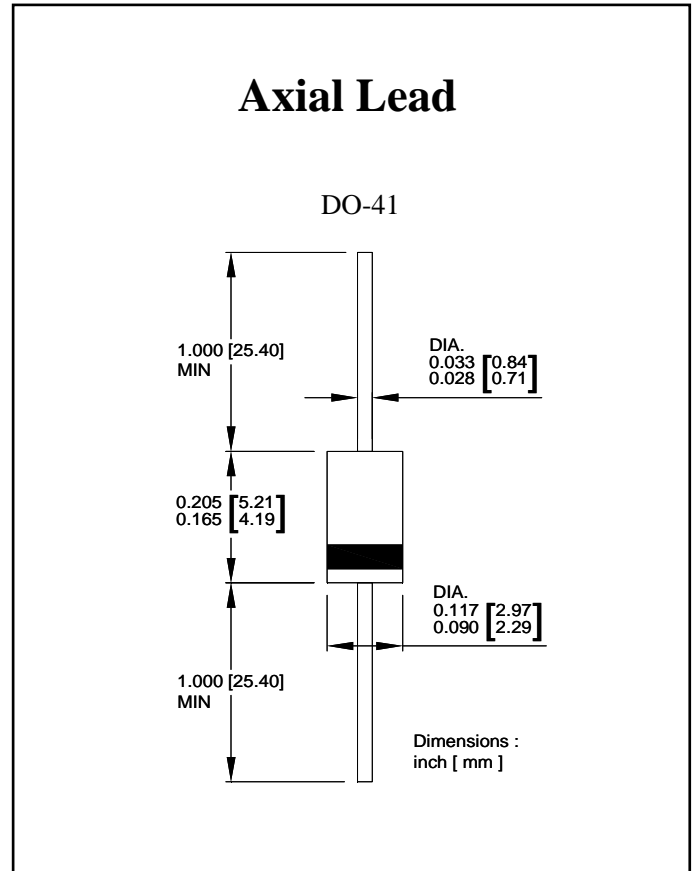
P_D: 1 W

Features

- Glass passivated chip
- Low leakage
- Built-in strain relief
- Low inductance
- High peak reverse power dissipation
- Lead (Pb)-free
- For use in stabilizing and clipping with high power rating

Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads,Solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any



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

Parameter	Symbol	Value	UNIT
DC power dissipation at T _L = 50 °C ⁽¹⁾	P _D	1	W
Maximum forward voltage at I _F = 200 mA	V _F	1.2	V
Maximum thermal resistance junction to ambient air ⁽²⁾	R _{ΘJA}	170	K/W
Junction temperature range	T _J	- 55 to + 175	°C
Storage temperature range	T _{STG}	- 55 to + 175	°C

Note:

(1) T_L = Lead temperature at 3/8 " (9.5mm) from body

(2) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case

Ratings and Characteristics Curves ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

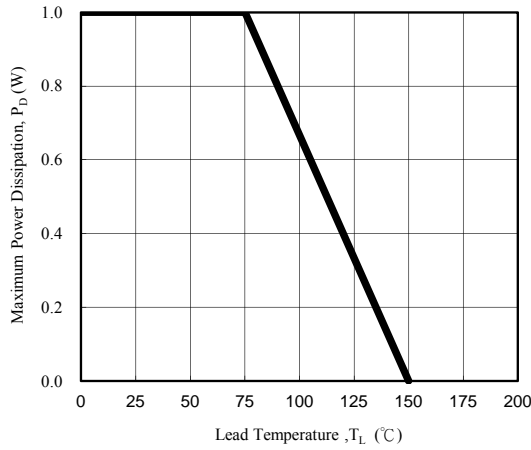


Fig. 1 - Power Temperature Derating Curve

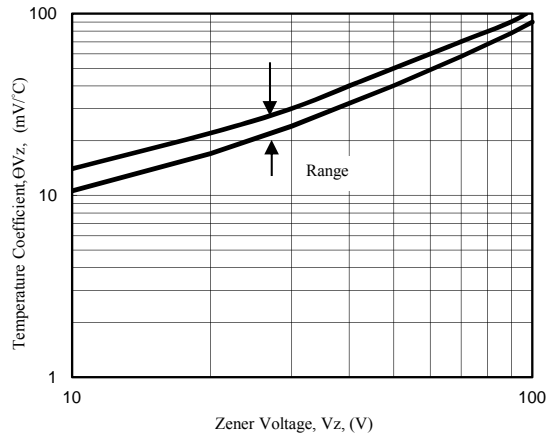


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

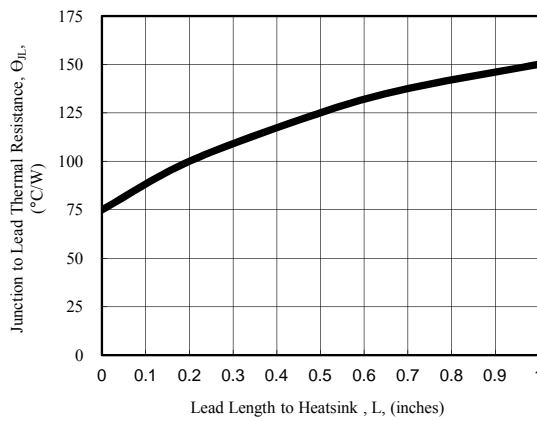


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

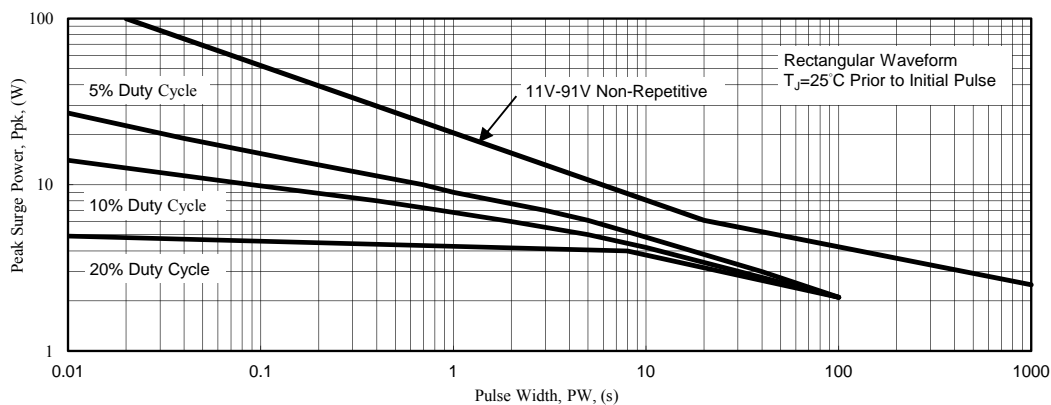


Fig. 4 - Maximum Surge Power

Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Part Number	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge Current
	$V_Z @ I_{ZT}$ (V)	I_{ZT} (mA)	$Z_{ZT} @ I_{ZT}$ (Ω)	$Z_{ZK} @ I_{ZK}$ (Ω)	I_{ZK} (mA)	$I_R @ V_R$ (μA) (V)		I_{ZM} (mA)	I_{RM} (mApk)
T1N4728A	3.3	76.0	10	400	1.00	100	1.0	274	1370
T1N4729A	3.6	69.0	10	400	1.00	100	1.0	251	1255
T1N4730A	3.9	64.0	9.0	400	1.00	50	1.0	232	1160
T1N4731A	4.3	58.0	9.0	400	1.00	10	1.0	210	1050
T1N4732A	4.7	53.0	8.0	500	1.00	10	1.0	192	960
T1N4733A	5.1	49.0	7.0	550	1.00	10	1.0	177	885
T1N4734A	5.6	45.0	5.0	600	1.00	10	2.0	161	805
T1N4735A	6.2	41.0	2.0	700	1.00	10	3.0	146	730
T1N4736A	6.8	37.0	3.5	700	1.00	5.0	4.0	133	660
T1N4737A	7.5	34.0	4.0	700	0.50	5.0	5.0	121	605
T1N4738A	8.2	31.0	4.5	700	0.50	5.0	6.0	110	550
T1N4739A	9.1	28.0	5.0	700	0.50	0.5	7.0	100	500
T1N4740A	10.0	25.0	7.0	700	0.25	0.5	7.6	91	454
T1N4741A	11.0	23.0	8.0	700	0.25	0.1	8.4	83	414
T1N4742A	12.0	21.0	9.0	700	0.25	0.1	9.1	76	380
T1N4743A	13.0	19.0	10	700	0.25	0.1	9.9	69	344
T1N4744A	15.0	17.0	14	700	0.25	0.1	11.4	61	305
T1N4745A	16.0	15.5	16	700	0.25	0.1	12.2	57	285
T1N4746A	18.0	14.0	20	750	0.25	0.1	13.7	50	250
T1N4747A	20.0	12.5	22	750	0.25	0.1	15.2	45	225
T1N4748A	22.0	11.5	23	750	0.25	0.1	16.7	41	205
T1N4749A	24.0	10.5	25	750	0.25	0.1	18.2	38	190
T1N4750A	27.0	9.5	35	750	0.25	0.1	20.6	34	170
T1N4751A	30.0	8.5	40	1000	0.25	0.1	22.8	30	150
T1N4752A	33.0	7.5	45	1000	0.25	0.1	25.1	27	135
T1N4753A	36.0	7.0	50	1000	0.25	0.1	27.4	25	125
T1N4754A	39.0	6.5	60	1000	0.25	0.1	29.7	23	115
T1N4755A	43.0	6.0	70	1500	0.25	0.1	32.7	22	110
T1N4756A	47.0	5.5	80	1500	0.25	0.1	35.8	19	95
T1N4757A	51.0	5.0	95	1500	0.25	0.1	38.8	18	90
T1N4758A	56.0	4.5	110	2000	0.25	0.1	42.6	16	80
T1N4759A	62.0	4.0	125	2000	0.25	0.1	47.1	14	70
T1N4760A	68.0	3.7	150	2000	0.25	0.1	51.7	13	65
T1N4761A	75.0	3.3	175	2000	0.25	0.1	56.0	12	60
T1N4762A	82.0	3.0	200	3000	0.25	0.1	62.2	11	55
T1N4763A	91.0	2.8	250	3000	0.25	0.1	69.2	10	50
T1N4764A	100.0	2.5	350	3000	0.25	0.1	76.0	9.0	45
TZ1110A	110.0	2.3	450	4000	0.25	0.1	83.6	8.6	40
TZ1120A	120.0	2.0	550	4500	0.25	0.1	91.2	7.8	37
TZ1130A	130.0	1.9	700	5000	0.25	0.1	98.8	7.0	34
TZ1150A	150.0	1.7	1000	6000	0.25	0.1	114.0	6.4	30
TZ1160A	160.0	1.6	1100	6500	0.25	0.1	121.6	5.8	28
TZ1180A	180.0	1.4	1200	7000	0.25	0.1	136.8	5.2	25
TZ1200A	200.0	1.2	1900	9990	0.25	0.1	152.0	4.7	22
TZ1220A	220.0	1.0	1600	8000	0.25	0.1	167.2	4.0	20
TZ1240A	240.0	0.9	1800	8500	0.25	0.1	182.4	3.8	19
TZ1250A	250.0	0.9	2000	9000	0.25	0.1	190.0	3.6	18
TZ1270A	270.0	0.8	2100	9000	0.25	0.1	205.0	3.3	16
TZ1300A	300.0	0.8	2300	9500	0.25	0.1	228.0	3.0	15
TZ1330A	330.0	0.7	2500	9500	0.25	0.1	250.2	2.7	13

Notes :

- (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$
- (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on IZT per JEDEC method