



ZM4728A - ZM4764A

SURFACE MOUNT SILICON ZENER DIODES

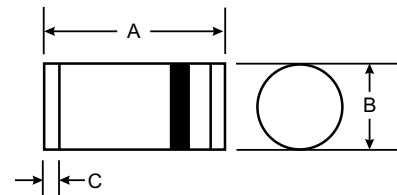
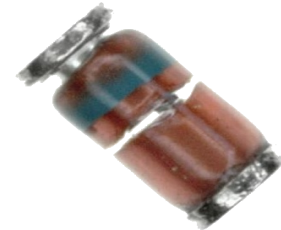
VOLTAGE RANGE: 3.3 - 100V
POWER: 1.0Watts

Features

- Complete voltage range 3.3 to 100 Volts
- High peak reverse power dissipation
- High reliability
- Low leakage current

Mechanical Data

- Case : DO-213AB(LL41) Molded plastic
Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.25 g



LL41/ DO-213AB		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.60
C	0.55 Nominal	
All Dimensions in mm		

Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Rating	Symbol	Value	Unit
DC Power Dissipation at $T_L = 50^\circ\text{C}$ (Note1)	P_D	1.0	Watt
Maximum Forward Voltage at $I_F = 200\text{ mA}$	V_F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air (Note2)	$R_{\theta JA}$	170	K / W
Junction Temperature Range	T_J	- 55 to + 175	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 175	$^\circ\text{C}$

Notes :

- (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.

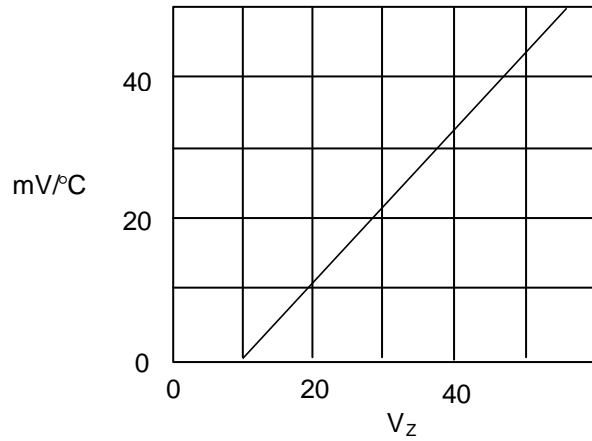


ELECTRICAL CHARACTERISTICS (Rating at 25 °C ambient temperature unless otherwise specified)

Type	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge Current
	$V_Z @ I_{ZT}$	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	I_{ZK}	$I_R @ V_R$		I_{ZM}	$I_{RM}^{(2)}$
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μ A)	(V)	(mA)	(mApk)
ZM4728A	3.3	76.0	10	400	1.0	100	1.0	276	1380
ZM4729A	3.6	69.0	10	400	1.0	100	1.0	252	1260
ZM4730A	3.9	64.0	9.0	400	1.0	50	1.0	234	1190
ZM4731A	4.3	58.0	9.0	400	1.0	10	1.0	217	1070
ZM4732A	4.7	53.0	8.0	500	1.0	10	1.0	193	970
ZM4733A	5.1	49.0	7.0	550	1.0	10	1.0	178	890
ZM4734A	5.6	45.0	5.0	600	1.0	10	2.0	162	810
ZM4735A	6.2	41.0	2.0	700	1.0	10	3.0	146	730
ZM4736A	6.8	37.0	3.5	700	1.0	10	4.0	133	660
ZM4737A	7.5	34.0	4.0	700	0.5	10	5.0	121	605
ZM4738A	8.2	31.0	4.5	700	0.5	10	6.0	110	550
ZM4739A	9.1	28.0	5.0	700	0.5	10	7.0	100	500
ZM4740A	10	25.0	7.0	700	0.25	10	7.6	91	454
ZM4741A	11	23.0	8.0	700	0.25	5.0	8.4	83	414
ZM4742A	12	21.0	9.0	700	0.25	5.0	9.1	76	380
ZM4743A	13	19.0	10	700	0.25	5.0	9.9	69	344
ZM4744A	15	17.0	14	700	0.25	5.0	11.4	61	305
ZM4745A	16	15.5	16	700	0.25	5.0	12.2	57	285
ZM4746A	18	14.0	20	750	0.25	5.0	13.7	50	250
ZM4747A	20	12.5	22	750	0.25	5.0	15.2	45	225
ZM4748A	22	11.5	23	750	0.25	5.0	16.7	41	205
ZM4749A	24	10.5	25	750	0.25	5.0	18.2	38	190
ZM4750A	27	9.5	35	750	0.25	5.0	20.6	34	170
ZM4751A	30	8.5	40	1000	0.25	5.0	22.8	30	150
ZM4752A	33	7.5	45	1000	0.25	5.0	25.1	27	135
ZM4753A	36	7.0	50	1000	0.25	5.0	27.4	25	125
ZM4754A	39	6.5	60	1000	0.25	5.0	29.7	23	115
ZM4755A	43	6.0	70	1500	0.25	5.0	32.7	22	110
ZM4756A	47	5.5	80	1500	0.25	5.0	35.8	19	95
ZM4757A	51	5.0	95	1500	0.25	5.0	38.8	18	90
ZM4758A	56	4.5	110	2000	0.25	5.0	42.6	16	80
ZM4759A	62	4.0	125	2000	0.25	5.0	47.1	14	70
ZM4760A	68	3.7	150	2000	0.25	5.0	51.7	13	65
ZM4761A	75	3.3	175	2000	0.25	5.0	56.0	12	60
ZM4762A	82	3.0	200	3000	0.25	5.0	62.2	11	55
ZM4763A	91	2.8	250	3000	0.25	5.0	69.2	10	50
ZM4764A	100	2.5	350	3000	0.25	5.0	76.0	9.0	45

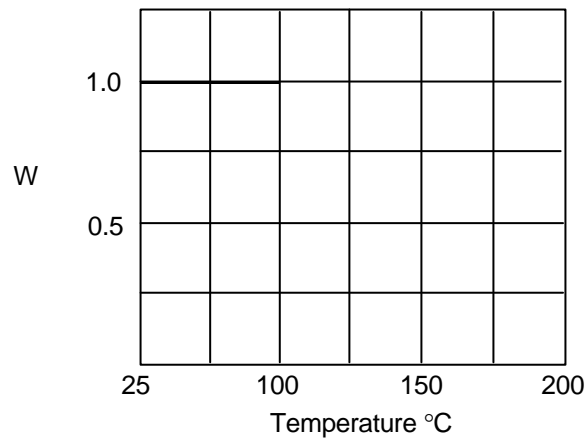


Figure 1 - Typical Temperature Coefficient



Typical Temperature Coefficient (mV/°C) – versus – Zener Voltage (V_z)

Figure 2 - Derating Curve



Power Dissipation (W) - Versus - Temperature °C