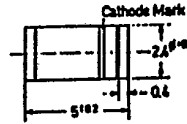




ZM4729 ... ZM4764

Telephone (508) 681-0392 • TeleFax (508) 681-9135

Silicon Planar Power Zener Diodes
for use in stabilizing and clipping circuits with high power rating. Standard Zener voltage tolerance is $\pm 10\%$. Add suffix "A" for $\pm 5\%$ tolerance. Other tolerances available upon request.



These diodes are also available in DO-41 case with the type designation 1N4729 ... 1N4764.

Glass case MELF

These diodes are delivered taped. Details see "Taping".

Weight approx. 0.25 g
Dimensions in mm

Absolute Maximum Ratings

	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	1 ¹⁾	W
Junction Temperature	T_j	200	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +200	$^\circ\text{C}$

¹⁾ Valid provided that electrodes are kept at ambient temperature

Characteristics at $T_{amb} = 25^\circ\text{C}$

	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	-	-	170 ¹⁾	K/W
Forward Voltage at $I_F = 200\text{ mA}$	V_F	-	-	1.2	V

¹⁾ Valid provided that electrodes are kept at ambient temperature

Type	Nominal Zener voltage ²⁾ at I_Z V_Z V	Test current I_{ZT} mA	Maximum Zener Impedance ¹⁾			Maximum reverse leakage current		Surge current at $T_A = 25^\circ\text{C}$ I_{ZM} mA	Maximum regulator current ²⁾ I_{ZM} mA
			at I_{ZT} Z_{ZT} Ω	Z_{ZK} Ω	at I_{ZK} I_{ZK} mA	I_R μA	at V_R V		
ZM4733	5.1	49	7	550	1.0	10	1	890	178
ZM4734	5.6	45	5	600	1.0	10	2	810	162
ZM4735	6.2	41	2	700	1.0	10	3	730	146
ZM4736	6.8	37	3.5	700	1.0	10	4	660	133
ZM4737	7.5	34	4.0	700	0.5	10	5	605	121
ZM4738	8.2	31	4.5	700	0.5	10	6	550	110
ZM4739	9.1	28	5.0	700	0.5	10	7	500	100
ZM4740	10	25	7	700	0.25	10	7.6	454	91
ZM4741	11	23	8	700	0.25	5	8.4	414	83
ZM4742	12	21	9	700	0.25	5	9.1	380	76
ZM4743	13	19	10	700	0.25	5	9.9	344	69
ZM4744	15	17	14	700	0.25	5	11.4	304	61
ZM4745	16	15.5	16	700	0.25	5	12.2	285	57
ZM4746	18	14	20	750	0.25	5	13.7	250	50
ZM4747	20	12.5	22	750	0.25	5	15.2	225	45
ZM4748	22	11.5	23	750	0.25	5	16.7	205	41
ZM4749	24	10.5	25	750	0.25	5	18.2	190	38
ZM4750	27	9.5	35	750	0.25	5	20.6	170	34
ZM4751	30	8.5	40	1000	0.25	5	22.8	150	30
ZM4752	33	7.5	45	1000	0.25	5	25.1	135	27

¹⁾ The Zener Impedance is derived from the 60 Hz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK} . Zener Impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

²⁾ Valid provided that electrodes are kept at ambient temperature.

³⁾ Tested with pulses.