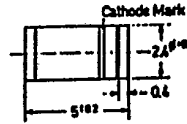




ZM4729 ... ZM4764

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 <sup>1)</sup>	W
Junction Temperature	$T_j$	200	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-65 to +200	$^\circ\text{C}$

<sup>1)</sup> 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 <sup>1)</sup>	K/W
Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	-	-	1.2	V

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature

Type	Nominal Zener voltage <sup>2)</sup> at $I_Z$ $V_Z$ V	Test current $I_{ZT}$ mA	Maximum Zener Impedance <sup>1)</sup>			Maximum reverse leakage current		Surge current at $T_A = 25^\circ\text{C}$ $I_{ZM}$ mA	Maximum regulator current <sup>2)</sup> $I_{ZM}$ mA
			at $I_{ZT}$ $Z_{ZT}$ $\Omega$	$Z_{ZK}$ $\Omega$	at $I_{ZK}$ $I_{ZK}$ mA	$I_{R}$ $\mu\text{A}$	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

<sup>1)</sup> 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.

<sup>2)</sup> Valid provided that electrodes are kept at ambient temperature.

<sup>3)</sup> Tested with pulses.