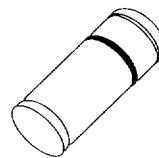


ZENER DIODES

- VOLTAGE RANGE : 2.4V TO 100V



MINIMELF
(Glass)

DESCRIPTION

500mW hermetically sealed glass silicon Zener diodes.

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit
P _{tot}	Power Dissipation	T _{lead} = 75°C	0.5 mW
I _{ZM}	Continuous Reverse Current	T _{lead} = 75°C	See page 2 mA
I _{ZSM}	Peak Reverse Current	T _{amb} = 25°C	See page 2 mA
T _{sig} T _j	Storage and Junction Temperature Range	– 65 to 200 – 55 to 200	°C
T _L	Maximum Temperature for Soldering during 15s	260	°C

THERMAL RESISTANCE

Symbol	Parameter	Value	Unit
R _{th (j-l)}	Junction-leads	250	°C/W

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^\circ C$ unless otherwise specified)

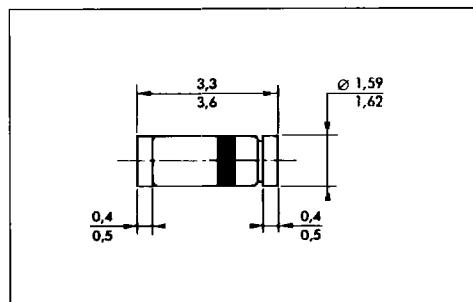
Types	V_{ZT}/I_{ZT^*}	r_{ZT}/I_{ZT^*}	I_{ZT^*}	r_{ZK}/I_{ZK}	$\propto V_Z$	I_R/V_R	V_R	I_{ZM}	T_{amb}	I_{ZSM}^{**}
	nom (V)	max (Ω)	(mA)	max (Ω)	(mA)	max ($10^{-4}/^\circ C$)	max (μA)	(V)	$75^\circ C$ (mA)	max (mA)
TMM 5221 B	2.4	30	20	1200	0.25	- 8.5	100	1.0	191	1984
TMM 5222 B	2.5	30	20	1250	0.25	- 8.5	100	1.0	182	1905
TMM 5223 B	2.7	30	20	1300	0.25	- 8.0	75	1.0	168	1764
TMM 5224 B	2.8	30	20	1400	0.25	- 8.0	75	1.0	162	1701
TMM 5225 B	3.0	29	20	1600	0.25	- 7.5	50	1.0	151	1587
P TMM 5226 B	3.3	28	20	1600	0.25	- 7.0	25	1.0	138	1443
P TMM 5227 B	3.6	24	20	1700	0.25	- 6.5	15	1.0	126	1323
P TMM 5228 B	3.9	23	20	1900	0.25	- 6.0	10	1.0	115	1221
P TMM 5229 B	4.3	22	20	2000	0.25	± 5.5	5	1.0	106	1107
P TMM 5230 B	4.7	19	20	1900	0.25	± 3.0	5	2.0	97	1013
P TMM 5231 B	5.1	17	20	1600	0.25	± 3.0	5	2.0	89	934
P TMM 5232 B	5.6	11	20	1600	0.25	+ 3.8	5	3.0	81	850
TMM 5233 B	6.0	7.0	20	1600	0.25	+ 3.8	5	3.5	76	794
P TMM 5234 B	6.2	7.0	20	1000	0.25	+ 4.5	5	4.0	73	768
P TMM 5235 B	6.8	5.0	20	750	0.25	+ 5.0	3	5.0	67	700
P TMM 5236 B	7.5	6.0	20	500	0.25	+ 5.8	3	6.0	61	635
P TMM 5237 B	8.2	8.0	20	500	0.25	+ 6.2	3	6.5	55	581
TMM 5238 B	8.7	8.0	20	600	0.25	+ 6.5	3	6.5	52	547
P TMM 5239 B	9.1	10	20	600	0.25	+ 6.8	3	7.0	50	523
P TMM 5240 B	10	17	20	600	0.25	+ 7.5	3	8.0	45	476
TMM 5241 B	11	22	20	600	0.25	+ 7.6	2	8.4	41	433
P TMM 5242 B	12	30	20	600	0.25	+ 7.7	1	9.1	38	397
TMM 5243 B	13	13	9.5	600	0.25	+ 7.9	0.5	9.9	35	397
P TMM 5244 B	14	15	9.0	600	0.25	+ 8.2	0.1	10	32	340
P TMM 5245 B	15	16	8.5	600	0.25	+ 8.2	0.1	11	30	317
TMM 5246 B	16	17	7.8	600	0.25	+ 8.3	0.1	12	28	298
TMM 5247 B	17	19	7.4	600	0.25	+ 8.4	0.1	13	27	280
TMM 5248 B	18	21	7.0	600	0.25	+ 8.5	0.1	14	25	265
TMM 5249 B	19	23	6.6	600	0.25	+ 8.6	0.1	14	24	251
TMM 5250 B	20	25	6.2	600	0.25	+ 8.6	0.1	15	23	238
TMM 5251 B	22	29	5.6	600	0.25	+ 8.7	0.1	17	21	216
TMM 5252 B	24	33	5.2	600	0.25	+ 8.8	0.1	18	19.1	198
TMM 5253 B	25	35	5.0	600	0.25	+ 8.9	0.1	19	18.2	190
TMM 5254 B	27	41	4.6	600	0.25	+ 9.0	0.1	21	16.8	176
TMM 5255 B	28	44	4.5	600	0.25	+ 9.1	0.1	21	16.2	170
TMM 5256 B	30	49	4.2	600	0.25	+ 9.1	0.1	23	15.1	159
TMM 5257 B	33	58	3.8	700	0.25	+ 9.2	0.1	25	13.8	144
TMM 5258 B	36	70	3.4	700	0.25	+ 9.3	0.1	27	12.6	132
TMM 5259 B	39	80	3.2	800	0.25	+ 9.4	0.1	30	11.5	122
TMM 5260 B	43	93	3.0	900	0.25	+ 9.5	0.1	33	10.6	111
TMM 5261 B	47	105	2.7	1000	0.25	+ 9.5	0.1	36	9.7	101
TMM 5262 B	51	125	2.5	1100	0.25	+ 9.6	0.1	39	8.9	93
TMM 5263 B	56	150	2.2	1300	0.25	+ 9.6	0.1	43	8.1	85
TMM 5264 B	60	170	2.1	1400	0.25	+ 9.7	0.1	46	7.6	79
TMM 5265 B	62	185	2.0	1400	0.25	+ 9.7	0.1	47	7.3	77
TMM 5266 B	68	230	1.8	1600	0.25	+ 9.7	0.1	52	6.7	70
TMM 5267 B	75	270	1.7	1700	0.25	+ 9.8	0.1	56	6.1	63
TMM 5268 B	82	330	1.5	2000	0.25	+ 9.8	0.1	62	5.5	58
TMM 5269 B	87	370	1.4	2200	0.25	+ 9.9	0.1	68	5.2	55
TMM 5270 B	91	400	1.4	2300	0.25	+ 9.9	0.1	69	5.0	52
TMM 5271 B	100	500	1.3	2600	0.25	+ 11.0	0.1	76	4.5	48

* Measure under thermal equilibrium and DC test conditions ($T_{amb} = 25^\circ C$).* * Rectangular waveform ($t_p = 10ms$).Tolerance on nominal V_{ZT} value : $\pm 5\%$.

Voltage > 100V on request.

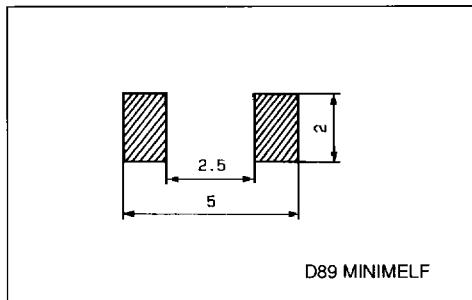
P : Preferred voltages.

Tight tolerance on preferred voltages : $\pm 3\% - \pm 2\%$.Forward voltage drop : $V_F \leq 1.1V$ ($T_{amb} = 25^\circ C$, $I_F = 200mA$).

PACKAGE MECHANICAL DATA**MINIMELF (Glass)**

Marking : ring at cathode end.

Weight : 0.05g

FOOT PRINT DIMENSIONS (millimeters)

D89 MINIMELF