

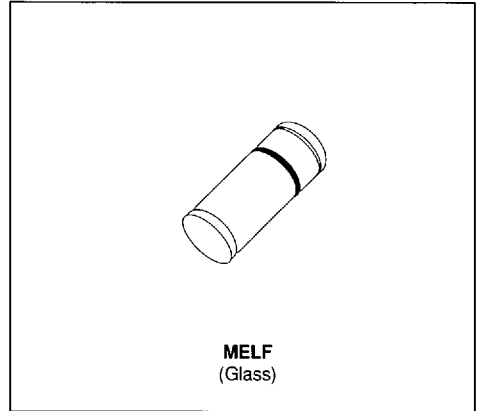

SGS-THOMSON
 MICROELECTRONICS

 T-11-13
 TM 4728A → TM 4764A

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ZENER DIODES

- VOLTAGE RANGE : 3.3V TO 100V

**DESCRIPTION**

1W hermetically sealed glass silicon Zener diodes.

ABSOLUTE RATINGS (limiting values)

Symbol	Parameter		Value	Unit
P_{tot}	Power Dissipation	$T_{lead} = 50^{\circ}C$	1	W
I_{ZM}	Continuous Reverse Current	$T_{lead} = 50^{\circ}C$	See page 2	mA
I_{ZSM}	Peak Reverse Current	$T_{amb} = 25^{\circ}C$	See page 2	mA
T_{stg} T_J	Storage and Junction Temperature Range		- 65 to 200	$^{\circ}C$
T_L	Maximum Temperature for Soldering during 15s		260	$^{\circ}C$

THERMAL RESISTANCE

Symbol	Parameter	Value	Unit
$R_{th(j-l)}$	Junction-leads	150	$^{\circ}C/W$

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

Types	V_{ZT}/I_{ZT}^*	r_{ZT}/I_{ZT}^*	I_{ZT}^*	r_{ZK}/I_{ZK}		αV_Z	I_R/V_R	V_R	I_{ZM}	I_{ZSM}^*
	nom (V)	max (Ω)	(mA)	max (Ω)	(mA)	typ ($10^{-2}/^{\circ}\text{C}$)	max (μA)	(V)	T_{amb} 55 C (mA)	max (mA)
P TM 4728A	3.3	10	76	400	1	-6	100	1.0	276	2381
TM 4729A	3.6	10	69	400	1	-6	100	1.0	252	2193
P TM 4730A	3.9	9	64	400	1	-5	50	1.0	234	2033
TM 4731A	4.3	9	58	400	1	-3	10	1.0	217	1812
P TM 4732A	4.7	8	53	500	1	-1	10	1.0	193	1667
P TM 4733A	5.1	7	49	550	1	1	10	1.0	178	1543
P TM 4734A	5.6	5	45	600	1	3	10	2.0	162	1389
P TM 4735A	6.2	2	41	700	1	4	10	3.0	146	1263
P TM 4736A	6.8	3.5	37	700	1	5	10	4.0	133	1167
P TM 4737A	7.5	4	34	700	0.5	5	10	5.0	121	1055
P TM 4738A	8.2	4.5	31	700	0.5	6	10	6.0	110	958
P TM 4739A	9.1	5	28	700	0.5	6	10	7.0	100	868
P TM 4740A	10	7	25	700	0.25	7	10	7.6	91	786
TM 4741A	11	8	23	700	0.25	7	5	8.4	83	718
P TM 4742A	12	9	21	700	0.25	7	5	9.1	76	656
TM 4743A	13	10	19	700	0.25	7	5	9.9	69	591
P TM 4744A	15	14	17	700	0.25	8	5	11.4	61	534
TM 4745A	16	16	15.5	700	0.25	8	5	12.2	57	487
TM 4746A	18	20	14	750	0.25	8	5	13.7	50	436
TM 4747A	20	22	12.5	750	0.25	8	5	15.2	45	393
TM 4748A	22	23	11.5	750	0.25	8	5	16.7	41	358
TM 4749A	24	25	10.5	750	0.25	8	5	18.2	38	326
TM 4750A	27	35	9.5	750	0.25	9	5	20.6	34	288
TM 4751A	30	40	8.5	1000	0.25	9	5	22.8	30	260
TM 4752A	33	45	7.5	1000	0.25	9	5	25.1	27	238
TM 4753A	36	50	7.0	1000	0.25	9	5	27.4	25	219
TM 4754A	39	60	6.5	1000	0.25	9	5	29.7	23	203
TM 4755A	43	70	6.0	1500	0.25	9	5	32.7	22	181
TM 4756A	47	80	5.5	1500	0.25	9	5	35.8	19	167
TM 4757A	51	95	5.0	1500	0.25	9	5	38.8	18	154
TM 4758A	56	110	4.5	2000	0.25	9	5	42.6	16	139
TM 4759A	62	125	4.0	2000	0.25	9	5	47.1	14	126
TM 4760A	68	150	3.7	2000	0.25	9	5	51.7	13	116
TM 4761A	75	175	3.3	2000	0.25	9	5	56	12	104
TM 4762A	82	200	3.0	3000	0.25	9	5	62.2	11	96
TM 4763A	91	250	2.8	3000	0.25	9	5	69.2	10	87
TM 4764A	100	350	2.5	3000	0.25	9	5	76	9	79

* Measure under thermal equilibrium and DC test conditions ($T_{amb} = 25^{\circ}\text{C}$)

** Rectangular wave form ($t_p = 10\text{ms}$)

Tolerance on nominal V_{ZT} value $\pm 5\%$

Voltage $> 100\text{V}$ on request

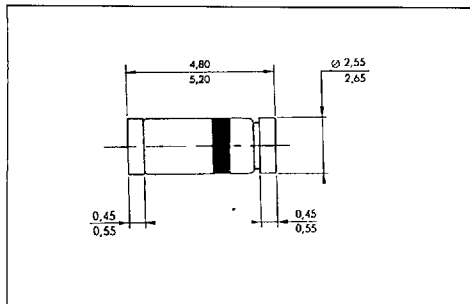
P Preferred voltages

Tight tolerances on preferred voltages $\pm 3\% - \pm 2\%$

Forward voltage drop $V_F \leq 1.2\text{V}$ ($T_{amb} = 25^{\circ}\text{C}$, $I_F = 200\text{mA}$)

PACKAGE MECHANICAL DATA

MELF Glass



Marking ring at cathode end
Weight 0.15g

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FOOT PRINT DIMENSIONS (millimeters)

