

# DUAL ZENER DIODES

ITT SEMICONDUCTOR/ INTERMETALL SOE D ■ 4682711 0002512 555 ■ ISI

## DZ89 Series 1W Dual Zener Diodes (SOT-89A Plastic Package) $T_A = 25^\circ\text{C}$

Two Zener diodes with common cathodes in one package. The common cathodes and the two anodes are each connected to a separate pin.

Type	Marking Code	Zener Voltage Range $V_Z$ at $I_{ZT}$ *	Maximum Zener Impedance $Z_{ZT}$ at $I_{ZT}$	Typical Temperature Coefficient at $I_{ZT}$	Test Current $I_{ZT}$	Min. Reverse Voltage at $I_R = 1\mu\text{A}$ $V_R$	Maximum Regulator Current $I_{ZM}$
		Volts	Ohms	%/ $^\circ\text{C}$	mA	Volts	mA
DZ89-C3V9	T1	3.7-4.1	7	-0.025	100	-	290
DZ89-C4V3	T2	4.0-4.6	7	-0.020	100	-	260
DZ89-C4V7	T3	4.4-5.0	7	-0.015	100	-	235
DZ89-C5V1	T4	4.8-5.4	5	-0.005	100	-	215
DZ89-C5V6	T5	5.2-6.0	2	+0.010	100	1.5	193
DZ89-C6V2	T6	5.8-6.6	2	+0.025	100	1.5	183
DZ89-C6V8	T7	6.4-7.2	2	+0.035	100	2.0	157
DZ89-C7V5	T8	7.0-7.9	2	+0.035	100	2.0	143
DZ89-C8V2	T9	7.7-8.7	2	+0.055	100	3.5	127
DZ89-C9V1	T10	8.5-9.6	4	+0.055	50	7.4	117
DZ89-C10	T11	9.4-10.6	4	+0.070	50	8.2	105
DZ89-C11	T12	10.4-11.6	7	+0.075	50	9.2	94
DZ89-C12	T13	11.4-12.7	7	+0.075	50	10	85
DZ89-C13	T14	12.4-14.1	10	+0.075	50	10.7	78
DZ89-C15	T15	13.8-15.8	10	+0.075	50	12	70
DZ89-C16	T16	15.3-17.1	15	+0.085	25	13.3	63
DZ89-C18	T17	16.8-19.1	15	+0.085	25	14.7	57
DZ89-C20	T18	18.8-21.2	15	+0.085	25	16.5	52
DZ89-C22	T19	20.8-23.3	15	+0.085	25	18.3	48
DZ89-C24	T20	22.8-25.6	15	+0.085	25	20.1	42
DZ89-C27	T21	25.1-28.9	15	+0.085	25	22.5	38
DZ89-C30	T22	28-32	15	+0.085	25	25.1	35
DZ89-C33	T23	31-35	15	+0.085	25	27.8	31
DZ89-C36	T24	34-38	40	+0.085	10	30.2	29
DZ89-C39	T25	37-41	40	+0.085	10	32.9	26
DZ89-C43	T26	40-46	45	+0.095	10	35.6	24
DZ89-C47	T27	44-50	45	+0.095	10	39.2	22
DZ89-C51	T28	48-54	60	+0.095	10	42.8	20
DZ89-C56	T29	52-60	60	+0.095	10	47.3	18
DZ89-C62	T30	58-66	80	+0.105	10	51.7	16
DZ89-C68	T31	64-72	80	+0.105	10	57.1	14
DZ89-C75	T32	70-79	100	+0.105	10	63.2	13
DZ89-C82	T33	77-88	100	+0.105	10	68.6	12
DZ89-C91	T34	85-96	200	+0.11	5	75.7	11
DZ89-C100	T35	94-106	200	+0.11	5	83.7	10
DZ89-C110	T36	104-116	250	+0.11	5	92.6	9
DZ89-C120	T37	114-127	250	+0.11	5	101.6	8
DZ89-C130	T38	124-141	300	+0.11	5	110.5	7
DZ89-C150	T39	138-156	300	+0.11	5	123	6.5
DZ89-C160	T40	153-171	350	+0.11	5	136	6
DZ89-C180	T41	168-191	350	+0.11	5	149	5.5
DZ89-C200	T42	188-212	350	+0.11	5	167	5.5

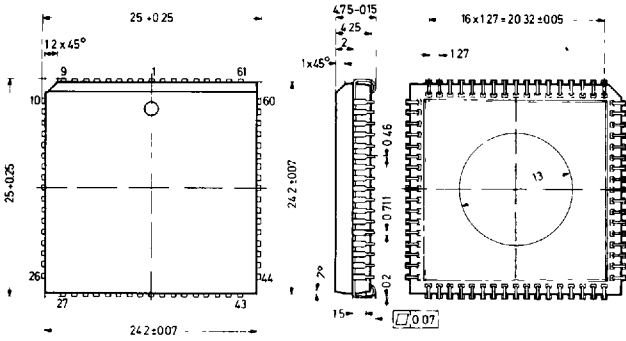
\* Measured with pulses  $t_p = 20$  ms.

The parameters are valid for both diodes in one case.  $\Delta V_Z$  and  $\Delta Z_{ZT}$  of the two diodes in one case is  $\leq 5\%$ .

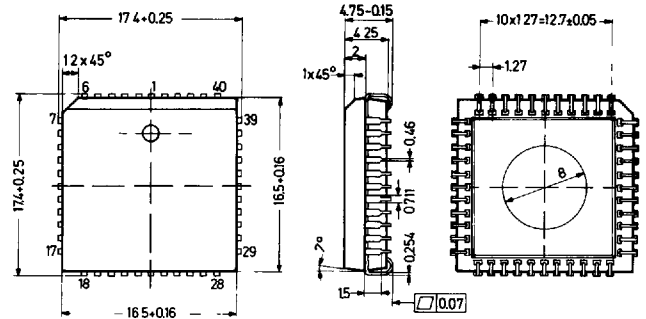
T.90.20

All Dimensions in mm

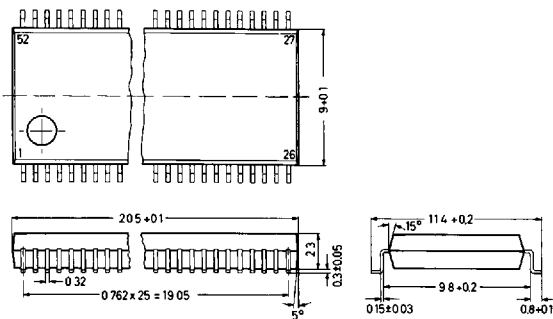
**68-Pin PLCC Package**  
Weight approx. 4.5 g



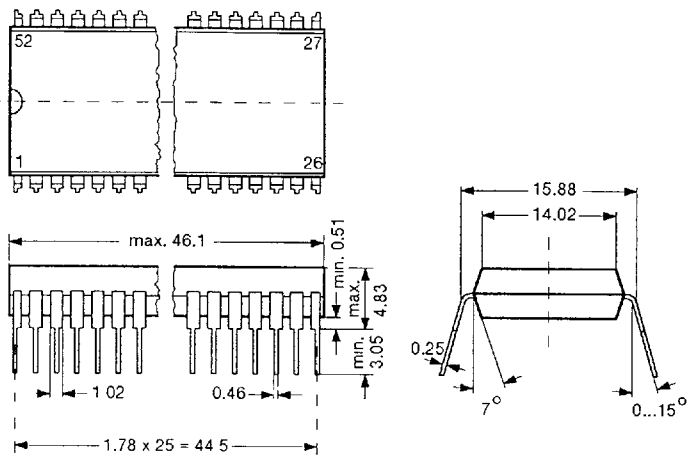
**44-Pin PLCC Package**  
Weight approx. 2.2 g



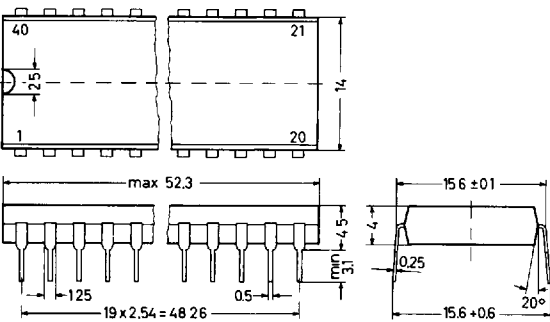
**52-Pin DIL Plastic SMD Package**  
Weight approx. 0.9 g



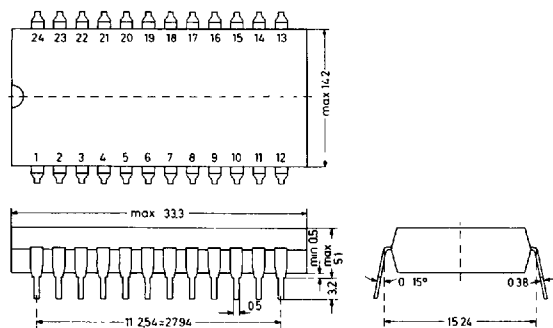
**52-Pin DIL Plastic Package**  
Weight approx. 5.5 g



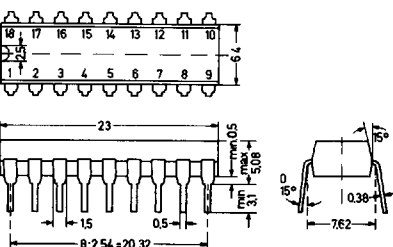
**40-Pin DIL Plastic Package**  
Weight approx. 6 g



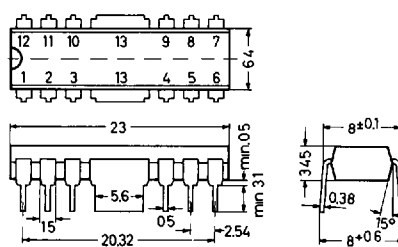
**24-Pin DIL Plastic Package**  
Weight approx. 4.5 g



**18-Pin DIL Plastic Package**  
Weight approx. 1.4 g



**18-Pin DIL Plastic Package with 2 Cooling Fins**  
Weight approx. 1.5 g

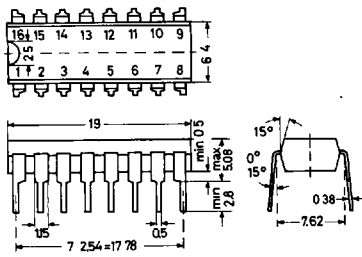


# PACKAGE OUTLINES

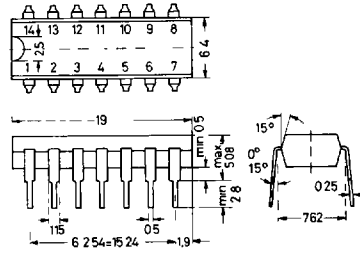
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All Dimensions in mm

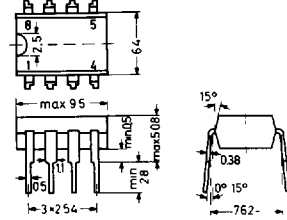
**16-Pin DIL Plastic Package**  
Weight approx. 1.1 g



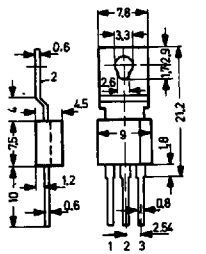
**14-Pin DIL Plastic Package TO-116**  
Weight approx. 1 g



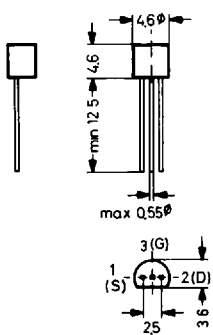
**8-Pin DIL Plastic Package**  
Weight approx. 0.5 g



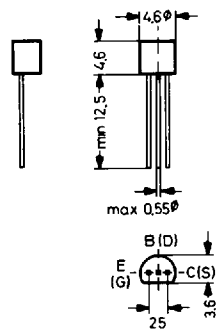
**Plastic Package TO-202**  
Weight approx. 1.2 g



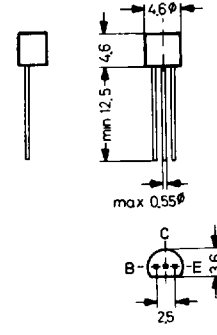
**TO-92 Plastic Package (10D3)**  
Pin in-Line "A"  
Weight approx. 0.18 g



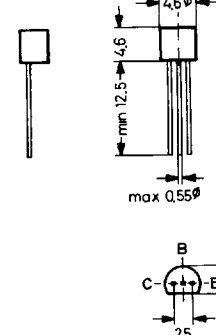
**TO-92 Plastic Package (10D3)**  
Pins in-Line "B"  
Weight approx. 0.18 g



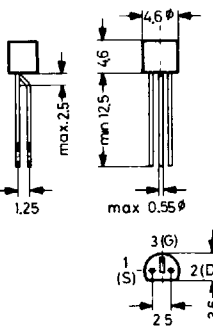
**TO-92 Plastic Package (10D3)**  
Pins in-Line "D"  
Weight approx. 0.18 g



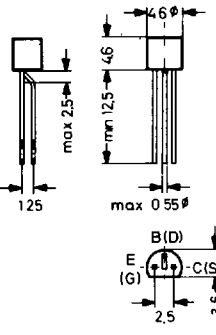
**TO-92 Plastic Package (10D3)**  
Pins in-Line "E"  
Weight approx. 0.18 g



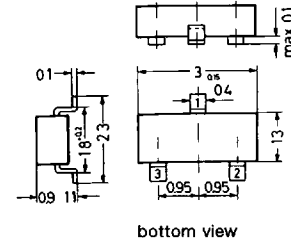
**TO-92 Plastic Package**  
Pins TO-18 "A"  
Weight approx. 0.18 g



**TO-92 Plastic Package**  
Pins TO-18 "B"  
Weight approx. 0.18 g

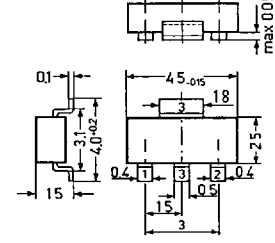


**TO-236 Plastic Package (23A3)**  
Weight approx. 0.008 g



bottom view

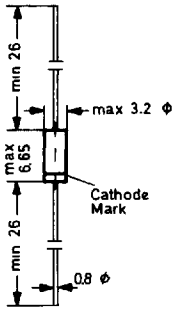
**SOT-89A Plastic Package**  
Weight approx. 0.04 g



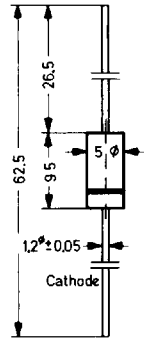
bottom view

All Dimensions in mm

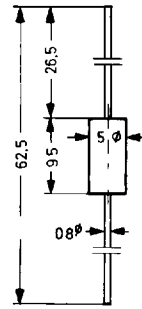
**P1 Plastic Package**  
Weight approx. 0.4 g



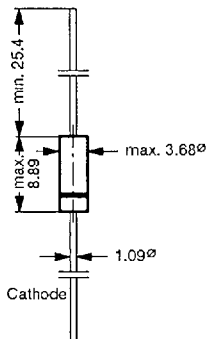
**P2 Plastic Package**  
Weight approx. 1 g



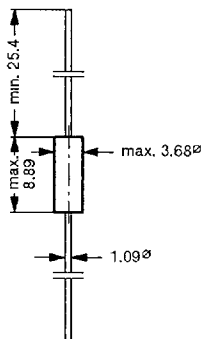
**P3 Plastic Package**  
Weight approx. 0.6 g



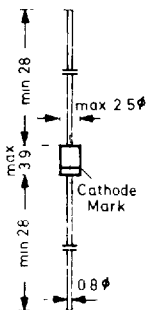
**17-02 Plastic Package**  
Weight approx. 0.6 g



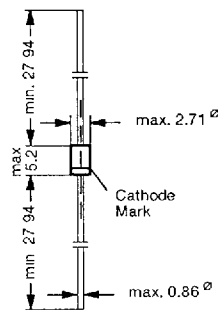
**17-02 Plastic Package**  
Weight approx. 0.6 g



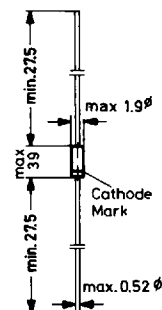
**DO-41 Glass Case**  
Weight approx. 0.35 g



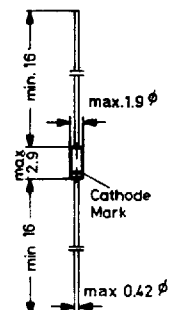
**DO-41 Plastic Package**  
Weight approx. 0.35 g



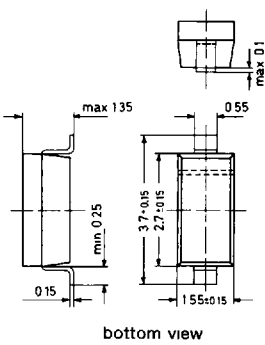
**DO-35 Glass Case**  
Weight approx. 0.13 g



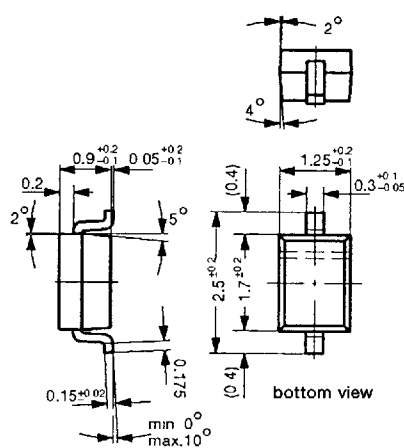
**DO-34 Glass Case**  
Weight approx. 0.07 g



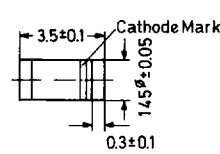
**≈60A2 Plastic Package**  
Weight approx. 0.01 g



**S-Mini Plastic Package**  
Weight approx. 0.004 g



**MiniMELF Glass Case**  
Weight approx. 0.05 g



**MELF Glass Case**  
Weight approx. 0.25 g

