T-41-38

Philips Components

Data sheet	
status	Product specification
date of issue	July 1990

LTD132
Liquid crystal display

DEVICE DESCRIPTION

The LTD132 is a 3 1/2-digit 7 segment clock display intended for use in alarm clocks, combined with an anologue clock display.

QUICK REFERENCE DATA

Viewing area dimensions	38.0 x 49.8 mm
Overall glass dimensions	46.8 x 54.8 mm
Thickness	2.7 +/ 0.4 mm
Digit height	5.6 mm
Preferred viewing direction	12 o'clock
Driving method	MUX 1:2

DISPLAY MODE

scale 1:1

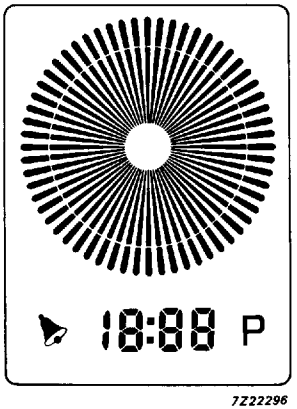

Fig.1 Analogue clock display.

TYPE DEPENDENT CHARACTERISTICS (1)

TYPE	ILLUMINATION MODE	CONNECTION METHOD	RELIABILITY GRADE	FAMILY CHARACTERISTICS (2)	OPERATING VOLTAGE (V)
LTD132R-11	reflective	for conductive rubber	commercial	TR1	typ. 5

Note: (1) drive method = 1:2
(2) see chapter "Family Characteristics" for complete specification

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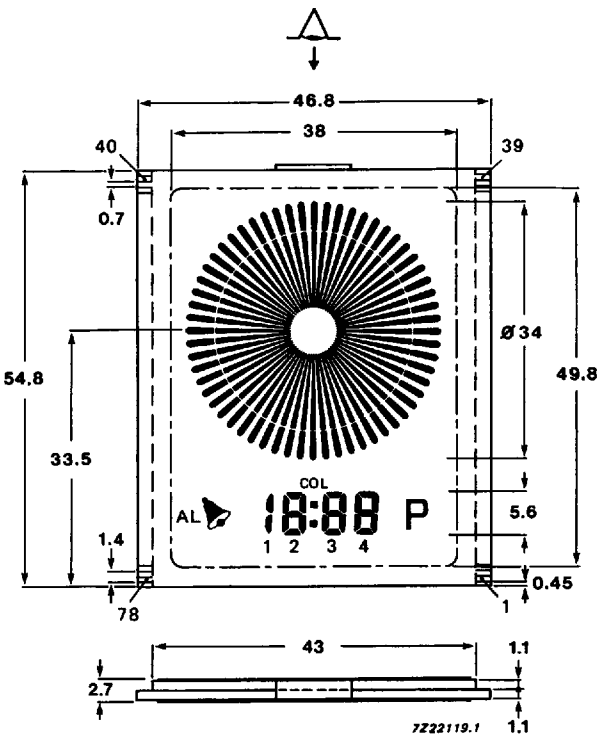
MECHANICAL DATA

Dimensions in mm



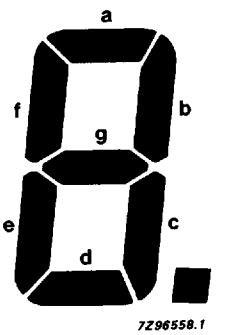


Fig.2 Display dimensions.

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PIN DESCRIPTION

PIN NO.	SEGMENT ASSIGNED TO COMMON 1	SEGMENT ASSIGNED TO COMMON 2
1	f2	e2
2	comm 1	n.c.
3	a2d2	g2
4	b2	c2
5	f3	e3
6	g3	d3
7	b3	c3
8	p	n.c.
9	a3	dp1/2
10	x29	y29
11	x28	y28
12	x27	y27
13	x26	y26
14	x25	y25
15	x24	y24
16	x23	y23
17	x22	y22
18	x21	y21
19	x20	y20
20	x19	y19
21	x18	y18
22	x17	y17
23	x16	y16
24	x15	y15
25	x14	y14
26	x13	y13
27	x12	y12
28	x11	y11
29	x10	y10
30	x9	y9
31	x8	y8
32	x7	y7
33	x6	y6
34	x5	y5
35	x4	y4
36	x3	y3
37	x2	y2
38	comm 1	n.c.
39	x1	y1

PIN NO.	SEGMENT ASSIGNED TO COMMON 1	SEGMENT ASSIGNED TO COMMON 2
40	n.c.	comm 2
41	x60	y60
42	x59	y59
43	x58	y58
44	x57	y57
45	x56	y56
46	x55	y55
47	x54	y54
48	x53	y53
49	x52	y52
50	x51	y51
51	x50	y50
52	x49	y49
53	x48	y48
54	x47	y47
55	x46	y46
56	x45	y45
57	x44	y44
58	x43	y43
59	x42	y42
60	x41	y41
61	x40	y40
62	x39	y39
63	x38	y38
64	x37	y37
65	x36	y36
66	x35	y35
67	x34	y34
68	x33	y33
69	x32	y32
70	x31	y31
71	x30	y30
72	n.c.	al
73	a1	h
74	f1	e1
75	g1	d1
76	b1	c1
77	n.c.	comm 2
78	n.c.	n.c.

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RATINGS

Limiting values in accordance with Absolute Maximum System (IEC 134)

Maximum voltage between any two connections (see note)	V_{max}	10 V RMS

Note: maximum DC component = 0.1 V

TYPE	RELIABILITY TESTS		
	Damp heat steady state T_{amb}/R.H./21 days	Low temperature storage T_{amb}/duration	High temperature storage T_{amb}/duration (dry)
LTD132R-11	+40 °C/90%/21 days	25 °C/21 days	+70 °C/21 days