

**Philips Components**

Data sheet	
status	Product specification
date of issue	July 1990

# LTD227

## Liquid crystal display

T-41-38

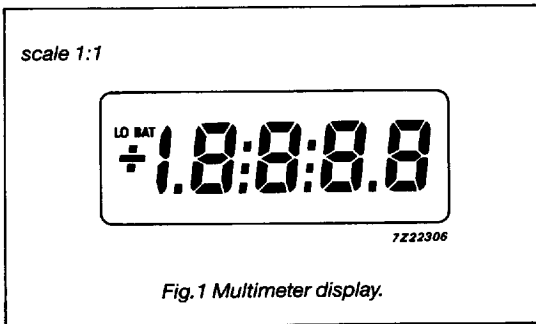
**DEVICE DESCRIPTION**

The LTD227 is a 4 1/2-digit, 7-segment multi-function LCD. Typical applications include panelmeters and multimeters.

**QUICK REFERENCE DATA**

Viewing area dimensions	46.8 x 18.8 mm
Overall glass dimensions	50.8 x 30.4 mm
Thickness	2.7 +/- 0.4 mm
Digit height	10.0 mm
Preferred viewing direction	6 o'clock
Driving method	direct drive

**DISPLAY MODE**



**TYPE DEPENDENT CHARACTERISTICS (1)**

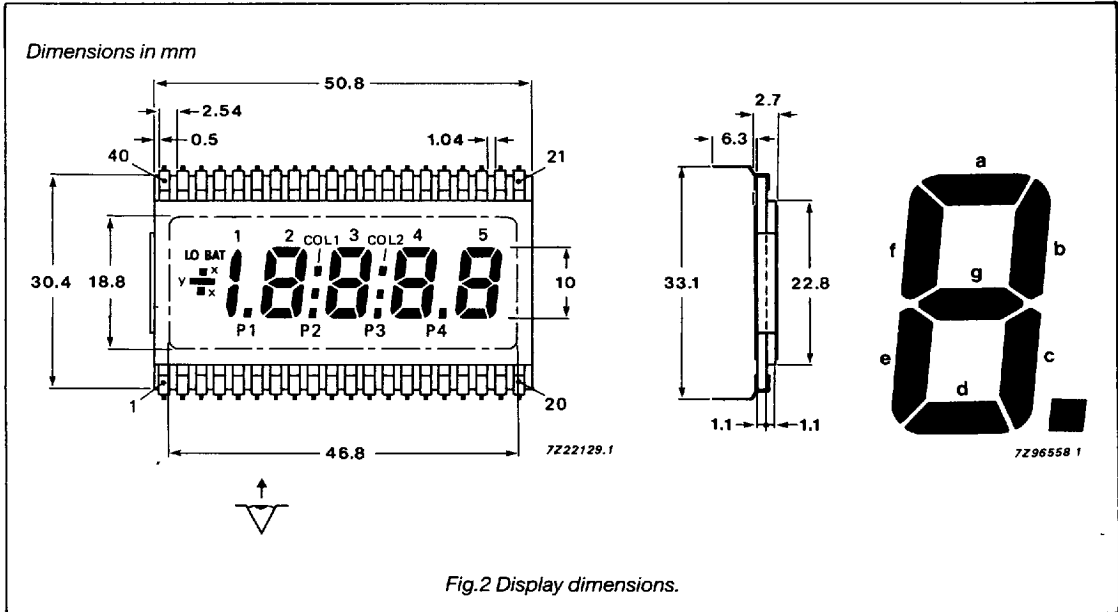
TYPE	ILLUMINATION MODE	CONNECTION METHOD	RELIABILITY GRADE	FAMILY (2) CHARACTERISTICS	OPERATING VOLTAGE (V)
LTD227R-12	reflective	with fixed pins	commercial	TR0	3.5 - 6.5
LTD227R-22	reflective	with fixed pins	extended	TR2	3.5 - 6.5
LTD227F-22	transflective	with fixed pins	extended	TF2	3.5 - 6.5

Note: (1) drive method = direct drive for all types  
 (2) see chapter "Family characteristics for complete specification"

Liquid crystal display

LTD227

MECHANICAL DATA



PIN DESCRIPTION

PIN NO.	SEGMENT
1	comm
2	y
3	1
4	p1
5	e2
6	d2
7	c2
8	p2
9	e3
10	d3
11	c3
12	p3
13	e4
14	d4
15	c4
16	p4
17	e5
18	d5
19	c5
20	b5

PIN NO.	SEGMENT
21	a5
22	f5
23	g5
24	b4
25	a4
26	f4
27	g4
28	col2
29	b3
30	a3
31	f3
32	g3
33	col1
34	b2
35	a2
36	f2
37	g2
38	LOBAT
39	x
40	n.c.

**Liquid crystal display****LTD227****RATINGS**

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

Maximum voltage between any two contacts (see note)

 $V_{\max}$ 

15 V RMS

Note: maximum DC component = 0.1 V

TYPE	RELIABILITY TESTS		
	Damp heat steady state $T_{\text{amb}}$ /R.H./duration	Low temperature storage $T_{\text{amb}}$ /duration	High temperature storage $T_{\text{amb}}$ /duration (dry)
LTD227R-12	+40 °C/90%/21 days	-25 °C/21 days	+70 °C/21 days
LTD227R-22	+80 °C/90%/21 days	-40 °C/21 days	+85 °C/21 days
LTD227F-22	+80 °C/90%/21 days	-40 °C/21 days	+85 °C/21 days