

INDICATOR TUBE

Long life cold cathode ten digit numeral indicator tube for side viewing.

QUICK REFERENCE DATA		
Numeral height		15.5 mm
Numerals	1 2 3 4 5 6 7 8 9 0	
Supply voltage	V_{ba}	min. 170 V
Cathode current	I_k	2.5 mA
Distance between mounting centres		min. 19 mm

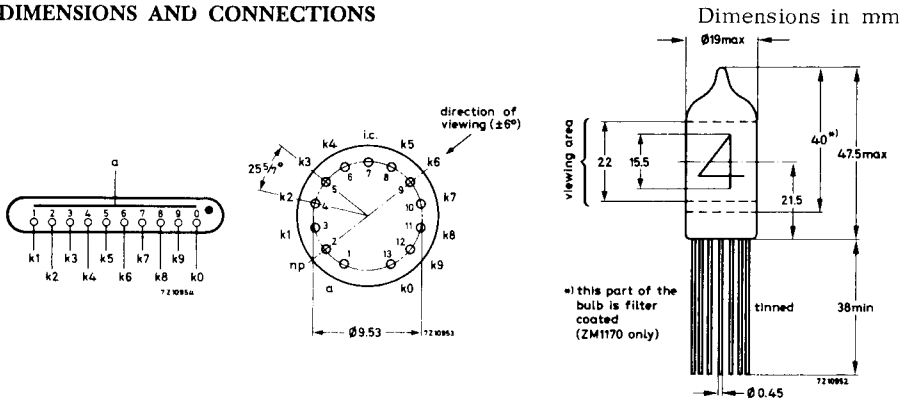
GENERAL

The numerals are 15.5 mm high and appear on the same base line allowing in-line read out. The ZM1170 is provided with a red contrast filter. The ZM1172 is identical to the ZM1170, but has no filter.

PRINCIPLE OF OPERATION

The tube contains ten cathodes in the form of ten figures and one common anode. By applying a suitable voltage between the anode and one of the ten cathodes the corresponding figure will be covered by a red neon glow.

DIMENSIONS AND CONNECTIONS



Mounting position: any

The numerals will appear upright (within $\pm 3^\circ$) when the tube is mounted vertically, base down.

Soldering

The tube may be soldered directly into the circuit, but heat conduction to the glass-to-metal seals should be kept to a minimum by the use of a thermal shunt.

The leads may be dip-soldered to a minimum of 5 mm from the seals at a solder temperature of 240°C for a maximum of 10 s.

Note

Care should be taken not to bend the leads nearer than 1.5 mm from the seals.

For electrical data please refer to type ZM1230

PHILIPS

Data handbook



Electronic
components
and materials

ZM1170 ZM1172

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