

DEVELOPMENT SAMPLE DATA

QUICK REFERENCE DATA

Gas discharge device, flat pack construction consisting of 7×5 dot matrix capable of displaying alpha numeric and symbolic information. The tube also incorporates a separate left hand decimal point. Suitable for both d.c. and dynamic drive. It gives a bright clear wide-angle display which can easily be read in unfavourable lighting conditions.

Character size	9.8 × 6.8	mm
Minimum distance between mounting centres	16	mm
Minimum supply voltage	220	V
*Tube dissipation	nom. 400	mW

*Supply power 800mW per tube, including dissipation in the current sharing resistors.

CHARACTERISTICS AND OPERATING CONDITIONS (measured at 20 to 50°C)

Minimum anode-to-cathode voltage necessary for ignition		220	V
Anode-to-cathode maintaining voltage at 1.5mA peak	min.	120	V
	nom.	140	V
Anode-to-cathode voltage below which a cathode will extinguish		115	V
Matrix cathode current (each cathode)	peak	min. 1.0	mA
	peak	max. 3.0	mA
	average (averaged over any 10ms)	max. 0.3	mA

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CHARACTERISTICS AND OPERATING CONDITIONS (contd.)

Decimal point cathode current

peak	min.	3.0	mA
peak	max.	6.0	mA
average (averaged over any 10ms)	max.	0.6	mA
Pulsed frequency	min.	800	Hz
Pulse width	min.	100	μ s

RATINGS (ABSOLUTE MAXIMUM SYSTEM)

Matrix cathode current (each cathode)

peak	max.	3.0	mA
average (averaged over any 10ms)	max.	0.3	mA

Decimal point cathode current

peak	max.	6.0	mA
average (averaged over any 10ms)	max.	0.6	mA

Envelope temperature (see note 1)

max.	+70	$^{\circ}$ C
min.	-50	$^{\circ}$ C

MOUNTING POSITION

Any

OPERATING NOTES

1. For envelope temperatures below $+10^{\circ}$ C the life expectancy of the tube is substantially reduced together with changes in characteristics.
2. The tube may be soldered directly into a printed circuit board.
3. The leads are tinned and may be dip-soldered to a minimum of 3mm from the envelope at a solder temperature of 240° C for a maximum of 10 seconds.
4. Care should be taken when bending leads.
5. It is recommended that a red (blue-light absorbing) filter be used preferably of circularly polarised type.

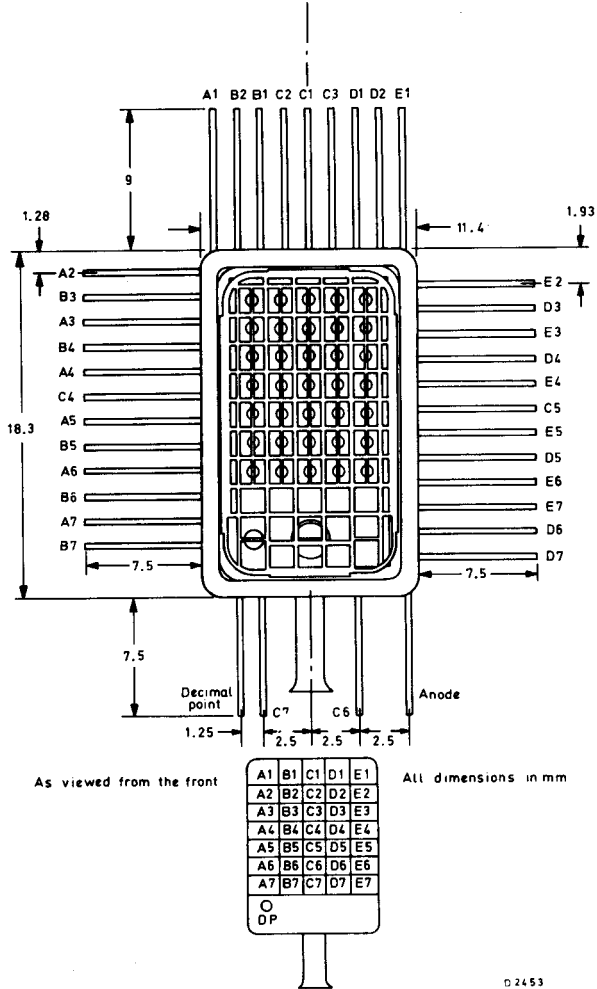
OUTLINE AND DIMENSIONS NOTES

Depth	max.	6.0	mm
Spacing between - top cathode leads		1.25 \pm 0.03	mm
- side cathode leads		1.30 \pm 0.03	mm
Cathode leads - width		0.30 \pm 0.03	mm
- thickness	nom.	0.1	mm
Anode lead - width	max.	0.5	mm
- thickness	nom.	0.1	mm

DOT MATRIX TUBE

ZM1250

OUTLINE AND DIMENSIONS

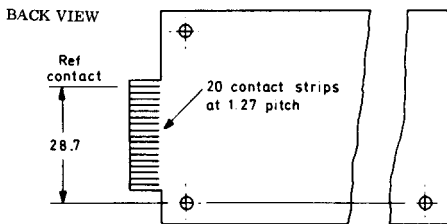
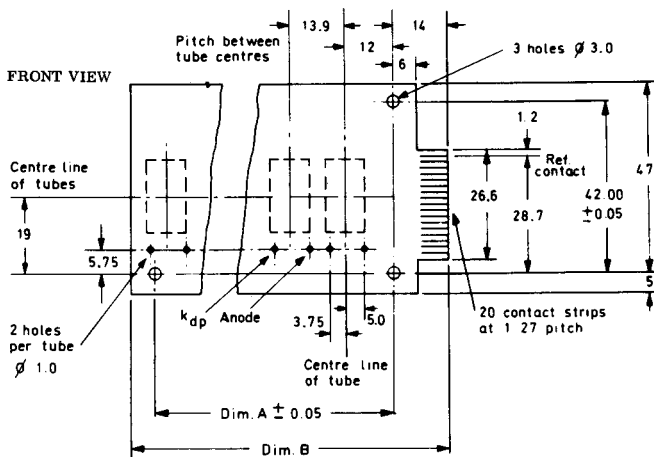


DOT MATRIX TUBE ASSEMBLIES

Z1250-A

Series

DEVELOPMENT SAMPLE DATA



All dimensions in mm

D2923

A suitable edge connector is Cannon PB15-40T-52.

Material of mounting board is epoxy glass fibre laminate 1.6mm thickness, copper clad both sides.

Type No.	No. of tubes	Dim. A	Dim. B
Z1250-A4	4	57.2	76
Z1250-A8	8	112.8	132.8
Z1250-A10	10	140.6	160.6

A1	B1	C1	D1	E1
A2	B2	C2	D2	E2
A3	B3	C3	D3	E3
A4	B4	C4	D4	E4
A5	B5	C5	D5	E5
A6	B6	C6	D6	E6
A7	B7	C7	D7	E7
DP				

FACE OF TUBE

Connections to cathodes listed in order with Reference Contact at top

Front	Back
E1	D2
D1	C3
C1	C2
B1	B2
A1	E2
A2	D3
B3	E3
A3	D4
B4	E4
A4	C5
C4	E5
A5	D5
B5	E6
A6	E7
B6	D6
A7	D7
blank	blank
B7	blank
C7	blank
C6	blank

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