

SCRIPTICON *

TH 9503

Electrostatic focus
Magnetic deflection

Diameter : 26 mm.
Length : 165 mm.

CHARACTER GENERATING CATHODE RAY TUBE

TH 9503 is a compact tube designed for economical method of generating alphanumeric characters and symbols for cathode ray display.

The output signal is generated by scanning the symbol that appears on the target pattern through an electron beam. A small T.V. type raster is generated in the scan circuit block. This raster is large enough to scan a single symbol on the target. The scan circuit also selects and positions the beam on the character to be generated.

With a reduced size (identical to the size of a 26 mm. diameter Vidicon) TH 9503 SCRIPTICON is capable of generating 64 characters (see fig. page 3) and uses similar components to those necessary for a Vidicon : deflection and alignment coils, base. Its electrostatic focus allows for obtaining high linearity in generating all the characters.

The output signal is proportional to the beam current with negative polarity with respect to a perfectly stable reference level (black level).

The amplitude of the signal is identical for all the characters.

GENERAL CHARACTERISTICS

Dimensions	see drawing page 4
Base	(Ditetrar (8 pins -JEDEC/n° E8-11
Operating position	any

* Registered Trade-Mark

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ELECTRICAL DATA

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MAXIMUM RATINGS -

Heater voltage	6.3 V $\pm$ 10 %
Heater current	0.150 A
Heater-cathode peak voltage :	
- Heater negative with respect to cathode.....	125 V
- Heater positive with respect to cathode	10 V
Signal electrode voltage (target)	600 V
Electrode g5 voltage (target)	600 V
Electrode g4 voltage (wall)	600 V
Electrode g3 voltage (focus)	600 V
Electrode g2 voltage (accelerator)	350 V
Electrode g1 voltage :	
-negative bias value	125 V
- positive bias value	0 V
Maximal peak signal current	2 μ A

OPERATING ELECTRICAL MODE *

	* Mode 1	* Mode 2
Signal electrode voltage.....	485 $\pm$ 15 V	285 $\pm$ 15 V
Electrode g5 voltage	450 V	250 V
Electrode g4 voltage	500 V	300 V
Electrode g3 voltage (adjustable)	150 $\pm$ 50 V	90 $\pm$ 30 V
Electrode g2 voltage	300 V	300 V
Electrode g1 voltage (adjustable)	-40 to -100V	-40 to -100V
Electrode g1 voltage required for cut off of beam current	- 70 V	- 70 V
Cathode voltage	0 V	0 V
Ampere-turns required for horizontal and vertical scanning one symbol	1.25 AT	1 AT
Ampere-turns required for horizontal and vertical scanning of the whole pattern	12.5 AT	10 AT
Angle between horizontal and vertical symbol rows	90 $\circ$ $\pm$ 0.5 $\circ$	
Typical signal current	1 μ A	
Optima value of load resistance in utilisation circuit (for low frequencies)	10 k Ω	

* Mode 1 = high resolution operation

* Mode 2 = economical operation

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TH 9503

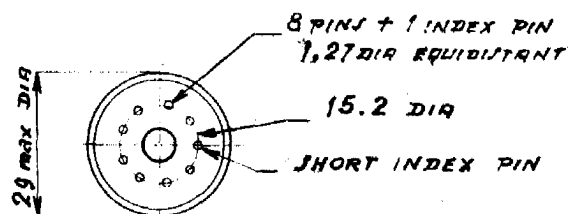
@ n° \$ % & '
 () * + , - . /
 0 1 2 3 4 5 6 7
 8 9 : ; < = > ?
 A B C D E F G
 H I J K L M N O
 P Q R S T U V W
 X Y Z ◻ ◻ ◻ ◻ ◻

Other type of pattern can be provided on request.

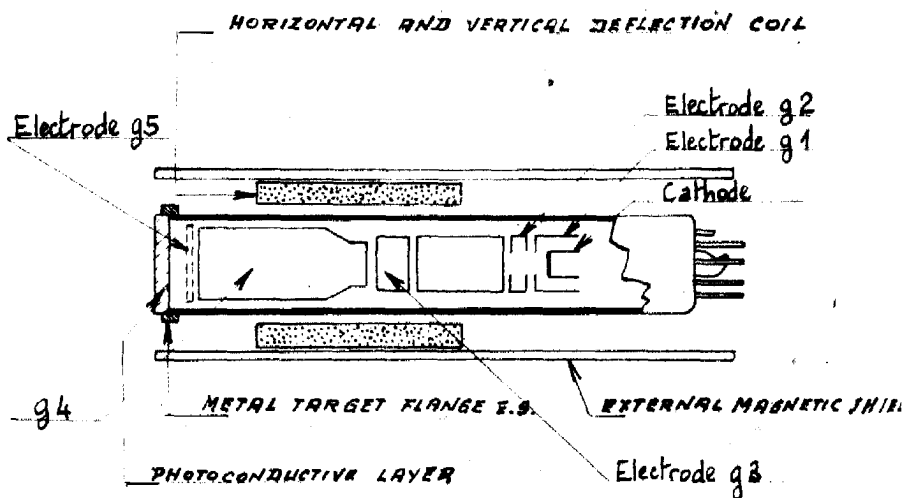
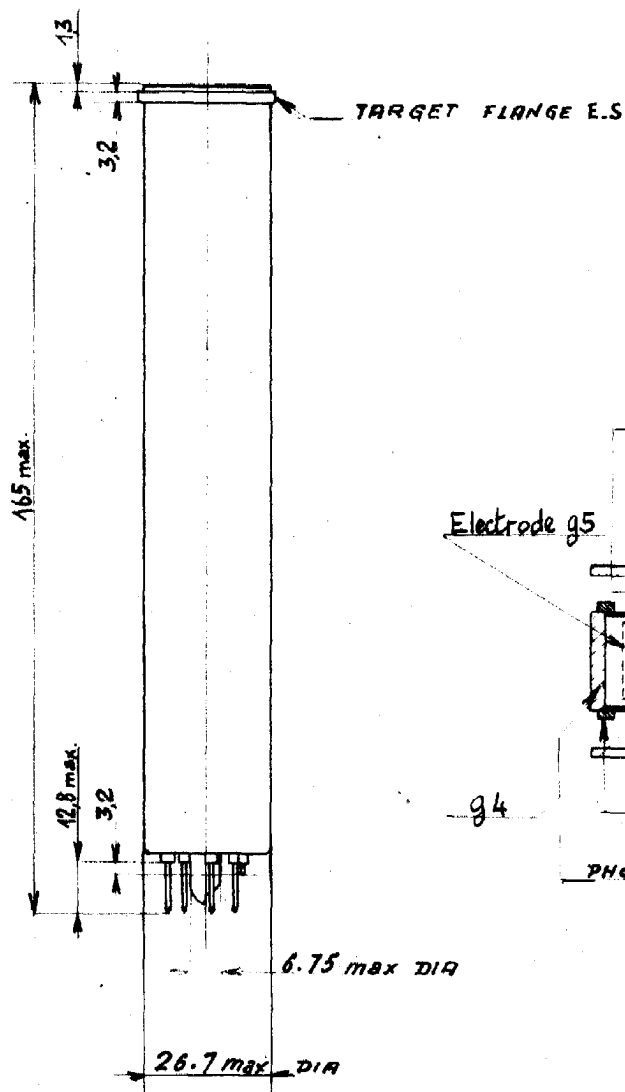
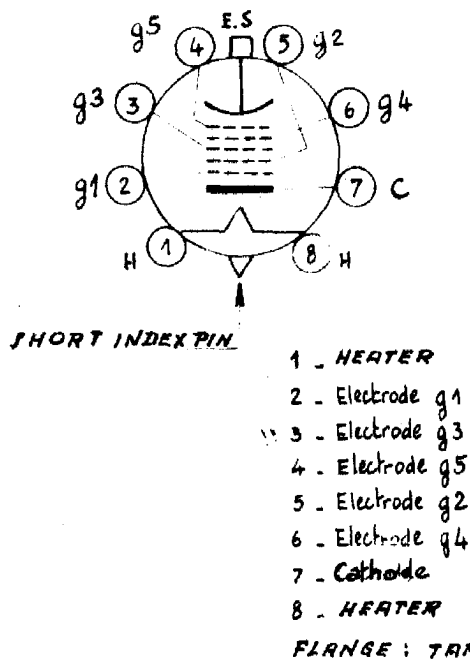


TH 9503

DIMENSIONAL OUTLINE



BASING DIAGRAM - BOTTOM VIEW



ALL DIMENSIONS IN MILLIMETERS