

ELECTRONIC TUBE REFERENCE

GL8511

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CAMERAPICKUP

Vidicon television camera tube designed for sensitive optical image pickup in studio, remote, industrial, or compact camera systems.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 90 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 CameraPickup	
MAXIMUM PLATE VOLTAGE	100 V
MAXIMUM SCREEN VOLTAGE	750 V
MAXIMUM CATHODE CURRENT	0.0006 mA
Vidicon camera section. MaxPlateVoltage stores target-voltage maximum; MaxScreenVoltage stores grid-2 maximum for lack of a more specific promoted field.	

Short low-heater-power vidicon for transistorized cameras, combining high sensitivity and low lag with industrial and live-pickup capability.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1964 RMA EIA

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1964 RMA EIA

Section 1 · CameraPickup

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Camera-tube type	Vidicon	—
Scanned target size	1/2 x 3/8 in	—
Maximum useful image diagonal	0.62 in	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage tolerance	+/-10 %	—
Faceplate illumination maximum	1000 foot-candle	—
Faceplate temperature maximum	71 C	—
Target voltage maximum	100 V	—
Target current peak maximum	0.6 uA	—
Dark current maximum	0.25 uA	—
Grid3-and-grid4 voltage maximum	750 V	—
Grid2 voltage maximum	750 V	—
Grid1 negative bias maximum	-300 V	—
Grid1 positive bias maximum	0 V	—
Heater-cathode voltage maximum heater negative	125 V	—
Heater-cathode voltage maximum heater positive	10 V	—
Typical faceplate temperature	30 to 35 C	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical grid3-and-grid4 voltage	250 to 300 V	—
Typical grid2 voltage	300 V	—
Grid1 picture-cutoff voltage	-45 to -100 V	—
Blanking voltage at grid1 minimum	75 V p-p	—
Blanking voltage at cathode minimum	20 V p-p	—
Focus-coil field strength	40 gauss	—
Alignment-coil field strength	0 to 4 gauss	—
Average-sensitivity faceplate illumination	1 foot-candle	—
Average-sensitivity target voltage	30 to 50 V	—
Average-sensitivity dark current	0.02 uA	—
Maximum-sensitivity faceplate illumination	0.2 foot-candle	—
Maximum-sensitivity target voltage	40 to 100 V	—
Maximum-sensitivity dark current	0.2 uA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	90 mA	—
Heater power approximate	0.6 W	—
Focus method	Magnetic	—
Deflection method	Magnetic	—
Resolution minimum at center	600 TV lines	—
Average gamma	0.65	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode-to-all capacitance	3.6 pF	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Transistorized camera / industrial and live television pickup	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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