



ELECTRONIC TUBE REFERENCE

FW113

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

IMAGECONVERTERINTENSIFIER

Two-stage cascaded image converter/intensifier with an S-11 photocathode and magnetic focusing. Its cascaded stages provide increased image brightness for low-light viewing or recording.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 ImageConverterIntensifier

No fixed ratings recorded.

Two diode-type image-converter stages in one envelope; optical/electron-image performance retained as parameters.

ITT Laboratories FW-113 is a two-stage cascaded image converter/intensifier with an S-11 photocathode and magnetic focusing.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT

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

1962 ITT

Section 1 · ImageConverterIntensifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Number of image-converter stages	2	—
Photocathode response	S-11	—
Output phosphor	P20	—
Useful cathode diameter	1.5 in	—
Useful phosphor diameter	1.5 in	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing magnetic flux density	475 gauss	—
Image magnification minimum	0.9 x	—
Image magnification maximum	1 x	—
Paraxial resolution	15 lp/mm	—
Overall luminous sensitivity	1000 uA/lm	—
Brightness gain with P20	400 x	—
Nominal stage voltage	12 kV	—

TUBE TINKER

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and their source documents.

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