

ELECTRONIC TUBE REFERENCE

FW109

Specialized - Photo Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

IMAGECONVERTERINTENSIFIER

Image-converter tube designed for direct photography, including intensification of stellar spectra. It converts weak optical imagery into a brighter output image suitable for photographic 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.

Image-converter tube; electrical operating/focus values are stated to be identical to type 6411/1C16 and are not invented here.

ITT Laboratories FW-109 is an image-converter tube for direct photography, including stellar-spectra intensification.

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
Cathode response	S-11	—
Cathode useful diameter	0.97 in	—
Phosphor type	P-11	—
Phosphor useful diameter	0.5 in	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Image magnification	0.68 x	—
Resolution at 16 kV	45 lp/mm	—
Reported photographic gain minimum	50 x	—
Reported photographic gain maximum	100 x	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Mica exit-window thickness	0.0004 in	—