

Rugged three-stage fibre-optic image intensifier with S25 extended-red photocathode, internal high-voltage supply, and automatic brightness control.

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
MAXIMUM PLATE VOLTAGE	7000 V

The PF253KC is a ruggedized three-stage image-intensifier assembly with fibre-optic input/output faceplates, an S25 extended-red photocathode, P20 screen, internal high-voltage supply, and automatic brightness control.

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input Voltage Maximum	7 V	—
Input Current Maximum	50 mA	—
Screen Luminance Maximum	500 cd/m2	—
Average Photocathode Illuminance Maximum	0.005 lux	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Nominal Performance Input Voltage	6.75 V	—
Input Current Typical	30 mA	—
Useful Cathode Diameter Minimum	23 mm	—
Photocathode Type	S25 extended-red	—
Photocathode Luminous Sensitivity Minimum	175 uA/lm	—
Photocathode Radiant Sensitivity at 800 nm Minimum	12 mA/W	—
Photocathode Radiant Sensitivity at 850 nm Minimum	6 mA/W	—
Center Resolution Minimum	28 lp/mm	—
Edge Resolution Minimum	25 lp/mm	—
Paraxial Magnification Typical	0.84	—
Distortion Typical	18 percent	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Luminance Gain Minimum	35000	—
Operating Temperature Range	-54 to +52 C	—