

Rugged 40 mm three-stage fibre-optic image intensifier with S20 photocathode, P20 phosphor, internal power supply, and automatic brightness control.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	— / 30 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 ImageConverterIntensifier

No fixed ratings recorded.

Specialized microwave/image-intensifier device. Published beam, cathode, anode, helix, collector, RF, gain/noise, and optical ratings are preserved in TUBE_SECTION_PARAMETER rather than forced into unrelated promoted plate/screen fields.

40 mm three-stage fiberoptic image intensifier with S-20 photocathode, P-20 phosphor, internal power supply, automatic brightness control, and ruggedized construction.

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
DC Input Voltage Maximum	7 V	—
DC Input Current Typical	30 mA	At 6.75 V input
DC Input Current Maximum	50 mA	At 6.75 V input
Operating Temperature Continuous Maximum	35 C	—
Photocathode Illuminance Average Maximum	0.005 lux	—
Useful Cathode Diameter Minimum	38 mm	—
Photocathode Luminous Sensitivity Minimum	175 uA/lm	2854K source
Photocathode Radiant Sensitivity Minimum	12 mA/W	800nm
Photocathode Radiant Sensitivity Minimum	6 mA/W	850nm
Center Resolution Minimum	28 lp/mm	—
Edge Resolution Minimum	25 lp/mm	11mm radius
Paraxial Magnification Typical	0.8 ratio	—
Distortion Typical	18 percent	16mm radius
Luminance Gain Minimum	35000 ratio	—
Equivalent Background Illumination Maximum	2e-7 lux	—
Screen Luminance Maximum	500 cd/m2	—
Screen Luminance Ratio Maximum	4 ratio	32mm diameter

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Operating Temperature Range	-54–52 C	—
Non-operating Temperature Range	-54–68 C	—

TUBE TINKER

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