

ELECTRONIC TUBE REFERENCE

8568

Specialized - Klystron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

KLYSTRON

Five-resonator fixed-tuned super-power klystron designed for 2856 MHz S-band linear-accelerator pulse service, delivering extremely high peak microwave power.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	15 V / 14 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Klystron	
MAXIMUM PLATE VOLTAGE	260000 V
MAXIMUM CATHODE CURRENT	270 A
Five-resonator pulsed super-power klystron.	

Five-resonator fixed-tuned super-power klystron for 2856 MHz S-band linear-accelerator pulse service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

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Section 1 · Klystron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	15 V	—
Heater/filament current	14 A	—
Minimum heating time	20 min	—
Peak beam voltage	260 kV	Pulse3.2us
Peak inverse beam voltage	50 kV	—
Peak beam current	270 A	—
Typical beam voltage	250 kV	HighOutput
Typical beam current	250 A	HighOutput
Driving power	105 W	HighOutput
Useful peak power output	21 MW	—
Power gain	53 dB	—
X-ray shielding required	Yes	HighVoltage

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Center frequency	2856 MHz	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode-to-cathode capacitance	42 pF	—

TUBE TINKER

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

