

ELECTRONIC TUBE REFERENCE

SZ50

Specialized - Klystron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

KLYSTRON

Very rugged reflex klystron local oscillator covering roughly 9.0-9.6 GHz, designed for exceptional frequency stability and reliability under severe conditions.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 1.2 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1	Klystron
MAXIMUM PLATE VOLTAGE	350 V
Klystron beam/resonator anode voltage is promoted to MaxPlateVoltage where applicable; original published labels and conditions are retained in parameter rows.	

Ferranti SZ50 is a very rugged reflex klystron local oscillator covering roughly 9.0-9.6 GHz. It is designed for high frequency stability and reliability under severe environmental conditions and uses convection cooling.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Ferranti

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

1963 FERRANTI

Section 1 · Klystron

FREQUENCY		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Operating frequency	9000–9600 Mc/s	9300 ±300 Mc/s

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Nominal
Heater voltage absolute limits	5.7–6.9 V	—
Heater current	1.2 A	Nominal ±10%
Maximum resonator voltage	350 V	—
Maximum resonator current	60 mA	—
Maximum negative reflector voltage	500 V	Magnitude; reflector negative
Maximum heater-cathode voltage	55 V	—
Maximum body temperature	200 C	—
Typical reflector voltage	-120--75 V	250 V resonator
Typical resonator current	20–40 mA	250 V resonator
Power output	29–66 mW	250 V resonator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum reflector current	5 uA	Typical table maximum
Electronic tuning range	15 Mc/s	Approximately ±15 Mc/s
Electronic tuning rate	1.3–4.3 Mc/s/V	—
Maximum warm-up frequency drift	10 Mc/s	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum tuner resetting error	2 Mc/s	—

TUBE TINKER

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