ELECTRONIC TUBE REFERENCE

3K22

Specialized - Klystron electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
KLYSTRON

Sperry 3K22 two-cavity klystron for microwave RF generation, with maximum accelerating voltage 3000 V and specified RF output 20–40 W.

General characteristics

BASE DESIGNATION	–	BASE PINS	8
NOMINAL HEATER	– / –	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

Section ratings

SECTION1 Klystron

No fixed ratings recorded.

Sperry RMA #452 (1945) two-cavity klystron. Maximum accelerating voltage 3000 V DC, beam current 150 mA, beam power input 450 W; control electrode 0 to -200 V, max current 3 mA; reflector none. Mechanical tuning 3330–4000 MHz; electronic tuning 10 MHz; maximum RF output 20–40 W. These are klystron accelerating-electrode/beam ratings, not conventional plate voltage/current/dissipation, so corresponding scalar fields remain null. Heater voltage/current not published in this source.

The 3K22 is a Sperry reflex klystron intended for microwave service at microwave frequencies.

SOURCE OPERATING CONDITIONS

1945 Sperry

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

1945 SPERRY

Section 1 · Klystron

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Acceleration voltage	**3000 V**	Published datasheet value
Acceleration voltage	**3000 V**	Published datasheet value
Beam current	**150 mA**	Published datasheet value
Beam current	**150 mA**	Published datasheet value
Beam power input	**450 W**	Published datasheet value
Beam power input	**450 W**	Published datasheet value

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Mechanical tuning range	**3330 to 4000 MHz**	Published datasheet value
Mechanical tuning range	**3330 to 4000 MHz**	Published datasheet value