



ELECTRONIC TUBE REFERENCE

TV2012

Specialized - Klystron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

KLYSTRON

Five-resonator very-high-power sealed-off S-band klystron amplifier for particle accelerators, providing high peak microwave power.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	25 V / 25 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Klystron	
MAXIMUM PLATE VOLTAGE	145000 V
<i>Klystron electron-beam device; beam/collector/cavity data retained in parameters.</i>	

The Thomson-Varian TV2012 is a five-resonator very-high-power sealed-off s-band klystron amplifier for particle accelerators.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1972 Thomson CSF

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

1972 THOMSON CSF

Section 1 · Klystron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum beam voltage	145000 V	—
Peak RF output power minimum	5000000 W	—
Average RF output power minimum	5000 W	—
Collector dissipation	35000 W	—
Minimum heating time	15 min	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Factory tuning frequency range	2.7–3.1 GHz	—
Heater voltage	25 V	—
Heater current approximate	25 A	—
Cooling	Water body/windows; vaporized-water collector	—
Cathode	Indirectly heated oxide-coated unipotential	—