

ELECTRONIC TUBE REFERENCE

6596

Specialized - Switching Tube electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
MICROWAVETR SWITCH

Broadband double TR gas switch with electromagnetic shutter for X-band radar duplexers, operating approximately 8.49–9.58 GHz at high peak power.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION 1 MicrowaveTRSwitch
No fixed ratings recorded.
Electrical ratings/characteristics audited; additional published numeric data retained in parameter table.

The 6596 is a broadband fixed-tuned double TR tube with an electromagnetic shutter, operating in X-band from 8490 to 9578 MHz at peak power levels up to 250 kW. The gas-filled TR sections protect the receiver during transmission.

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 · Microwave TR Switch

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
with a maximum power level of	250 kW	with a maximum power level of 250 kW peak.
Electromagnet dc voltage supply e	28 V	Electromagnet dc voltage supply e 28
Electromagnet coils current L L o e [1]	250 A	Electromagnet coils current L L o e 250 to 310 mA
Electromagnet coils current L L o e [2]	310 A	Electromagnet coils current L L o e 250 to 310 mA
Shutter attenuation e e min	60	Shutter attenuation e e min. 60 dB
Ignitors current, each L L L [1]	100 A	Ignitors current, each L L L . 100 200 HA
Ignitors current, each L L L [2]	200 A	Ignitors current, each L L L . 100 200 HA
Ignitor voltage e	1000 V	Ignitor voltage e 1000 - %
Applied power, peak [1]	1 kW	Applied power, peak 1 250 kW
Applied power, peak [2]	250 kW	Applied power, peak 1 250 kW
Spike leakage energy ([1]	1 us	Spike leakage energy (1 us pulse) , 0.3 erg
Spike leakage energy ([2]	0.3 us	Spike leakage energy (1 us pulse) , 0.3 erg
Recovery time for [1]	200 kW	Recovery time for 200 kW peak power 7 us
Recovery time for [2]	7 kW	Recovery time for 200 kW peak power 7 us
Antenna - Transmitter attenuation	10	Antenna - Transmitter attenuation 10 - dB

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension continue appliquée aux bODINAZES cceseessssnacovoessssssascssss	28 V	Tension continue appliquée aux bODINAZES cceseessssnacovoessssssascssss 28 v
Taux d'ondes stationnaires en tension & bas NIVEAU ccssssssccacsseses Max	12 V	Taux d'ondes stationnaires en tension & bas NIVEAU ccssssssccacsseses Max 1,2
Les obturateurs du	6596 W	Les obturateurs du 6596 ne sont pas prévus pour la commutation de puissances supé-