

ELECTRONIC TUBE REFERENCE

8578

Specialized - Switching Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

MICROWAVETR SWITCH

Broadband gas-filled transmit-receive switching tube designed to protect a microwave radar receiver from high-power transmitter pulses while permitting reception between pulses.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION 1 Microwave TR Switch
No fixed ratings recorded.
Microwave TR discharge section.

The 8578 is a broadband gas-filled transmit-receive tube used to protect a microwave receiver during transmitter pulses.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1964 RMA EIA

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

1964 RMA EIA

Section 1 · MicrowaveTRSwitch

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Operational Frequency Minimum	2700 MHz	—
Operational Frequency Maximum	2900 MHz	—
Maximum VSWR	1.2 ratio	—
Isolation Minimum	20 dB	IgnitorCurrent=0
Spike Leakage Energy Maximum	0.1 erg	2800MHz; 200kW
Flat Leakage Energy Maximum	0.2 erg	2800MHz; 300kWp
Recovery Time Maximum	10 us	600kWPeak

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ignitor Current Minimum	100 uA	—
Ignitor Current Maximum	200 uA	—
Maximum Transmitter Peak Power	1 MW	—