

JETEC TYPE DESIGNATION REGISTRATION FORM TR TUBES

Manufacturer's Designation: 8578 Date: 4-13-64

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Manufacturer: Metcom, Inc., Salem, Mass.

General Characteristics:

The 8578 is a dual broad band TR tube designed to effectively decouple the receiver from a common transmitting and receiving antenna during a period of transmission. Its operational band is from 2700 to 2900 megacycles.

Special Feature:

Total Leakage Energy 0.3 erg max. and Ignitor Noise Ratio less than 1.1.

Electrical Data - Typical Values

Operational Band VSWR max.	1.2	2700 to 2900 Mc/s
Isolation, $I_i=0$ uAdc		20 db min.
Ignitor Ignition Time		5 sec. Max.
Ignitor Voltage Drop at $I_i=200$ uAdc		-250 to -400 volts
Spike Leakage Energy at 2800Mc, $p_o=200$ kw		0.1 ergs max.
Flat Leakage Energy at 2800Mc, $p_o=200$ kw		0.2 ergs max.
Duplexer Loss at $I_i=200$ uAdc		0.8 db max.
Arc Loss at 2800Mc, $p_o = 20$ kw		0.6 db max.
Recovery Time at 600 kw peak, 3 db down		10 usec max.
High Level VSWR		1.15 max.

Mechanical Data - General

8578

Dimensions

See Outline dated
2-3-64

Mounting Position

Any

Mates with

Special Flange

Weight, approximately

41 oz.

Absolute Maximum Ratings

Transmitter Peak Power

1 MW

Ignitor Current

100 to 200 uAdc

Operating Temperature

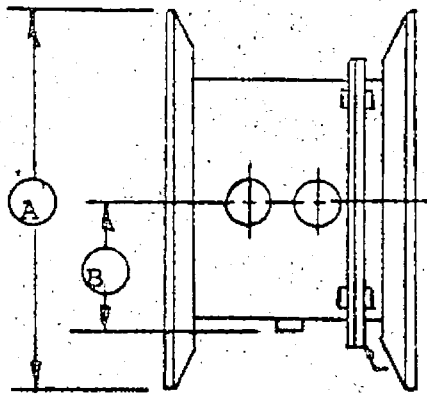
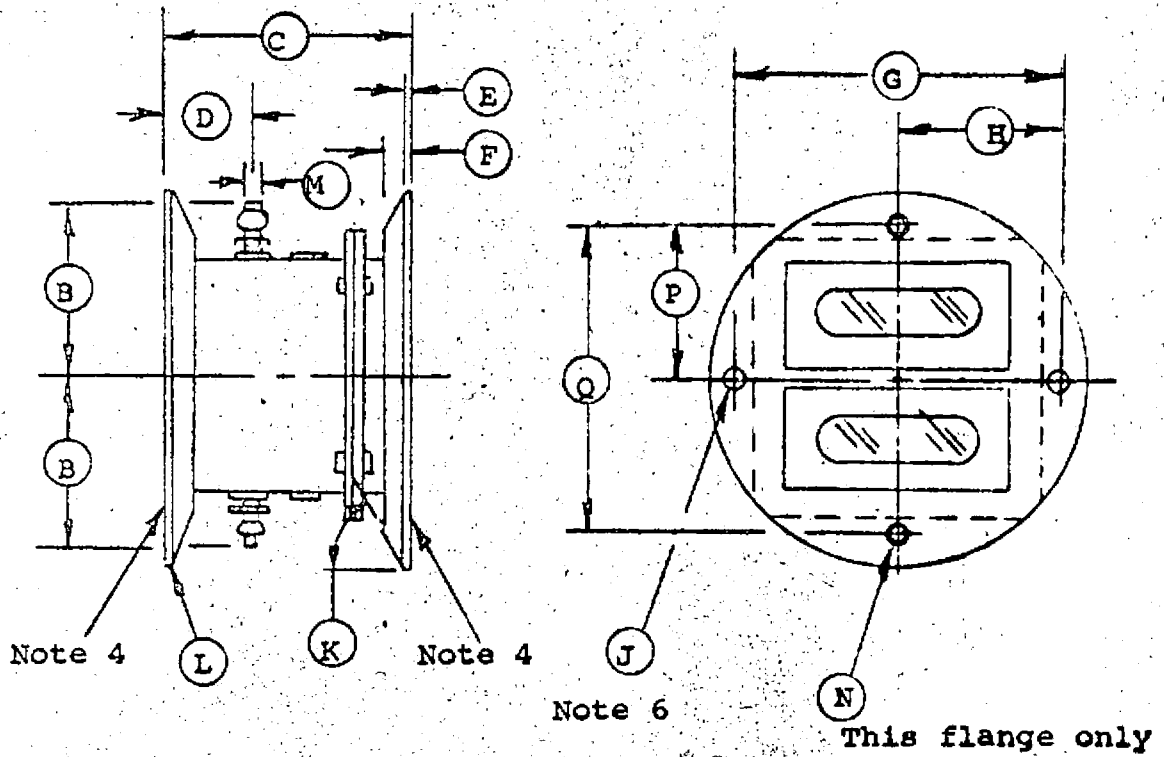
-29 to +52°C

Operating Altitude

15,000 Ft. min.

Ignitor Open Circuit Supply Voltage

-500 to -700 Vdc



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Ref.	Dimension In Inches
A**	5.000±.005 Dia. Typ.
B*	2.450 Max.
C	3.312±.015
D*	1-1/8 Ref.
E**	0.085±.010 Typ.
F**	0.250±.015 Typ.
G*	3.750±.002 Typ.
H*	1.875±.002 Typ.
J	0.256±.003-.000(4) Holes
K**	70 ±1° Typ.
L**	0.03 Rad. Max. Typ.
M	0.250 Dia. Nom.
N	1/4-20NC 2 Holes
P*	1.810±.005
Q*	3.620±.005

Note 1: No part of the tube shall extend beyond 5.000 Dia. cylinder formed by the flanges.

Note 2: No part of window shall extend beyond the flange faces.

Note 3: Cadmium plated per Fed. Spec. QQ-P-416, Class I, Type I, bright finish. All of flange to be free from paint.

Note 4: These surfaces to be parallel with each other within .005 TIR.

Note 5: O.D. of flanges must be concentric with .010 TIR.

Note 6: 4 holes, location ±.003 from vertical centerline.

Note 7: Both flanges shall be flat within .001 TIR.

SPECIFICATION SHEET

OUTLINE

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