engineering data service

SYLVANIA 5927

QUICK REFERENCE DATA

The Sylvania Type 5927 is an integral cavity broadband transmit-receive tube designed to effectively decouple the receiver from a common transmitting and receiving antenna during a period of transmission. Its operational band is 3100 to 3500 megacycles.

MECHANICAL DATA

Dimensions:

Per outline

Mounting Position:

Any

Number of Ignitors:

One

Ambient Temperature Range:

(non-operating)

-40°C to +100°C

ELECTRICAL DATA

RATINGS

Transmitter Peak Power (min.)	100	kw
Ignitor Open Circuit Supply Voltage (min.)	-500	Vdc
Ignitor Open Circuit Supply Voltage (max.)		

GENERAL DATA

Operational Band for Voltage Standing Wave Ratio of 1.6 max. 3100 to 3500 mc Spike Leakage Energy (max.) 0.3 ergs Flat Leakage Power (max.) (1) 50 may Insertion Loss at 3300 mc and zero Ignitor Current (mex.) 0.7 db Ignitor Interaction at 3300 mc 0.3 db and 200 uAdc Ignitor Current (max.) Ignitor Voltage Drop at 200 uAdc Ignitor Current -275 to -425 Vdc 15 usec Recovery Time (max.) (2)

NOTES

(1) Tested at 200 KW RF power; pulse length of 1.0 ± .15 usec and 0.5 ± .15 usec; 1000 pps; at 3300 mc; with ignitor current of 200 uAdc.

NOTES (cont'd)

(2) Tested at 750 KW RF power; pulse length of 1.0 usec; 500 pps; at 3425 ± 25 mc; with ignitor current of 200 uAdc. The loss of signal in the tube at the specified time after the transmitter pulse shall not be greater than 3.0 db in excess of the loss at 800 to 1000 usec after the pulse.

