

## X-Band Magnetron

2J55 is a fixed frequency pulsed type X-band magnetron, designed to operate in the frequency range of 9345 to 9405 MHz with a peak output power of 50 kW. It is packaged and waveguide output type and forced air cooled.

## ---- MAXIMUM RATINGS ----

	Min	Max	Unit
Peak anode current	3.5	16.0	A
Perk anode power input	-	230	kW
Duty cycle	-	0.001	-
Pulse duration	-	2.5	us
Rate of rise of voltage pulse	-	100	kV/us
Anode temperature	-	100	degree centigrade
V.S.W.R at the output coupler	-	1.5:1	-

## ---- ELECTRICAL ----

	Min	Typical	Max	Unit
Heater voltage (Note 1)	5.7	6.3	6.9	V
Preheat time	120	-	-	S
Peak anode voltage (Note 2)	11.0	12.0	13.0	kV
Peak output power (Note 2)	40	-	-	kW
Frequency (Note 2)	9345	-	9405	MHz

Note 1: Measured with heater voltage of 6.3V and no anode input power, the heater current limits are 0.9A minimum, 1.1A maximum.

For average pulse input powers less than 150 watts the heater voltage must be reduced within 3 seconds after the application of h. t. according to the following schedule:

$$E_f = 6.3 \sqrt{1 - \frac{P_i}{150}} \text{ volts}$$

where  $P_i$  = mean input power in watts.

Note 2: Measured at peak anode current 12A.

