



NJC3901C *X-Band Circulator*

GENERAL DESCRIPTION

NJC3901C is an X-band circulator designed for X-band radar application. It transmits power from the magnetron to the antenna as well as the receiving signal from the antenna to the receiver port.

CHARACTERISTICS ($T_A = 25 \pm 5^\circ\text{C}$, P_i is less than 10mW)

Frequency range 9400 \pm 100MHz

V. S. W. R. 1.2 max

Insertion loss

Port No. 1 to Port No. 2 0.5 dB max

Port No. 2 to Port No. 3 0.5 dB max

Port No. 3 to Port No. 1 0.5 dB max

Isolation

Port No. 1 to Port No. 3 25 dB min

Port No. 3 to Port No. 2 25 dB min

Port No. 2 to Port No. 1 25 dB min

MAXIMUM AND MINIMUM RATINGS

	Min	Max
Transmitter Power (average)	—	30 W
Transmitter Power (peak) (see note 1)	—	30 kW
Ambient temperature (non-operating) (see note 2)	-40	+100 °C
Ambient temperature (at operating) (see note 2)	-30	+70 °C

GENERAL

Overall dimensions see outline drawings

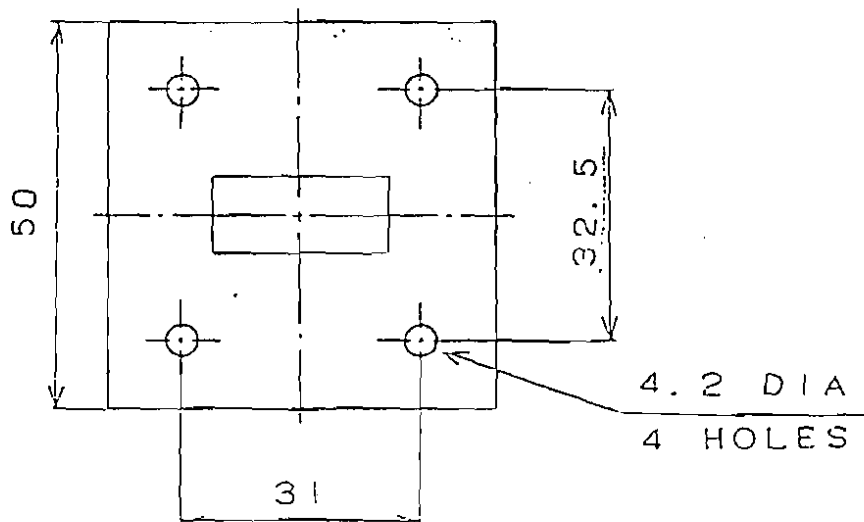
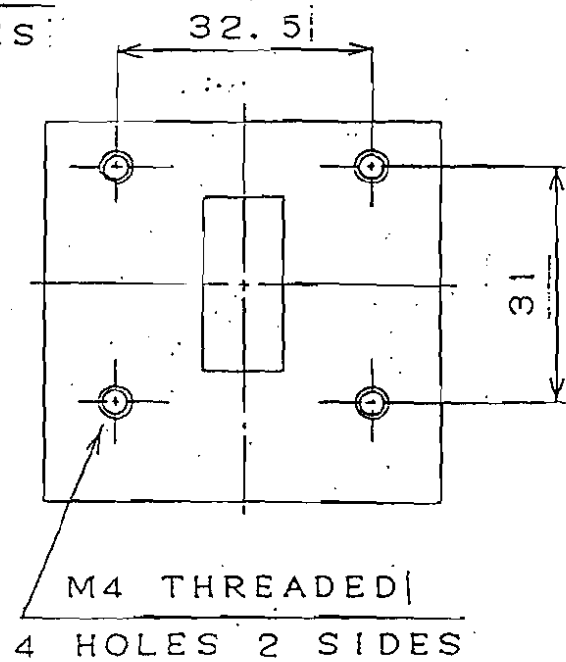
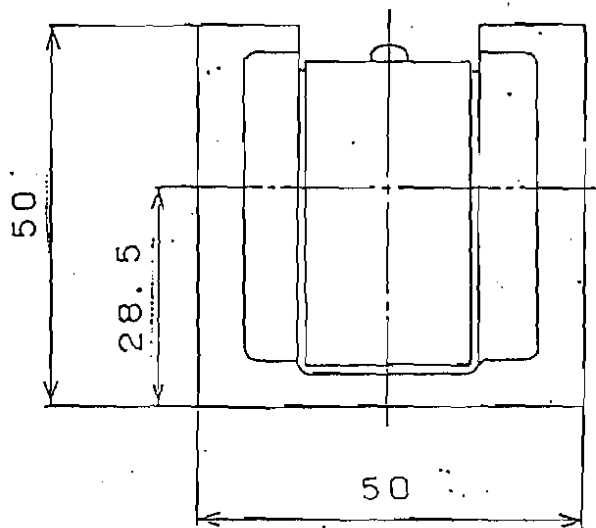
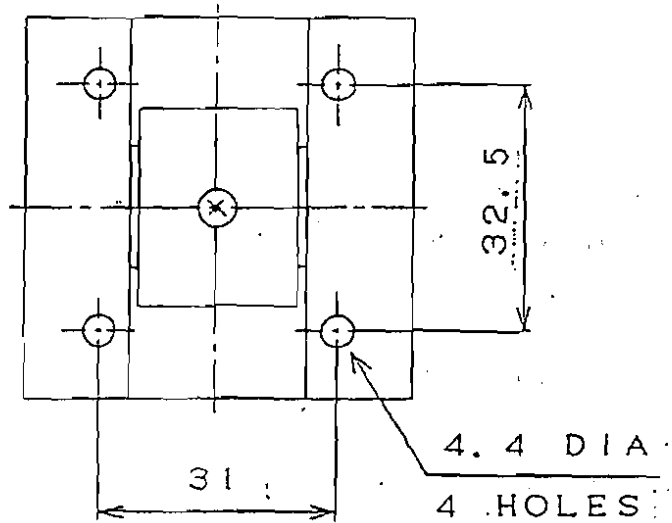
Waveguide WR90

Cooling air

NOTES

1. The V. S. W. R. looking into an antenna should be less than 2.
2. Avoid condensation and freezing of atmospheric moisture.

OUTLINE



Units are millimeters.
All dimensions are nominal.