

**Released**

# X-band Circulator

## Model No. NJC3901M

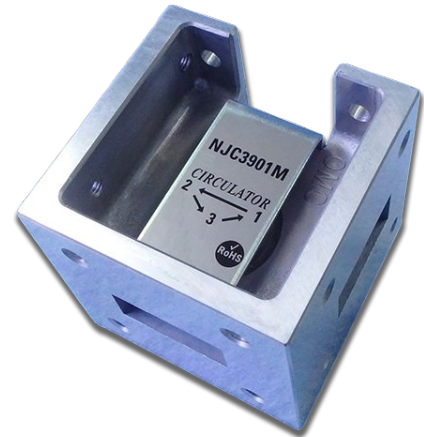
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## ■ GENERAL DESCRIPTION

NJC3901M is a waveguide type circulator, designed for X-band Marine Radar.



## ■ ABSOLUTE MAXIMUM RATINGS

PARAMETERS	MINIMUM	MAXIMUM	UNITS
Frequency range	9.3	9.5	GHz
Peak power	-	30	kW
Average power	-	30	W
Storage temperature	-40	+100	°C
Operating temperature	-30	+85	°C
Pulse width	-	1.3	μs
Duty	-	0.001	-
Humidity	-	90	%

## ■ ELECTRICAL CHARACTERISTICS

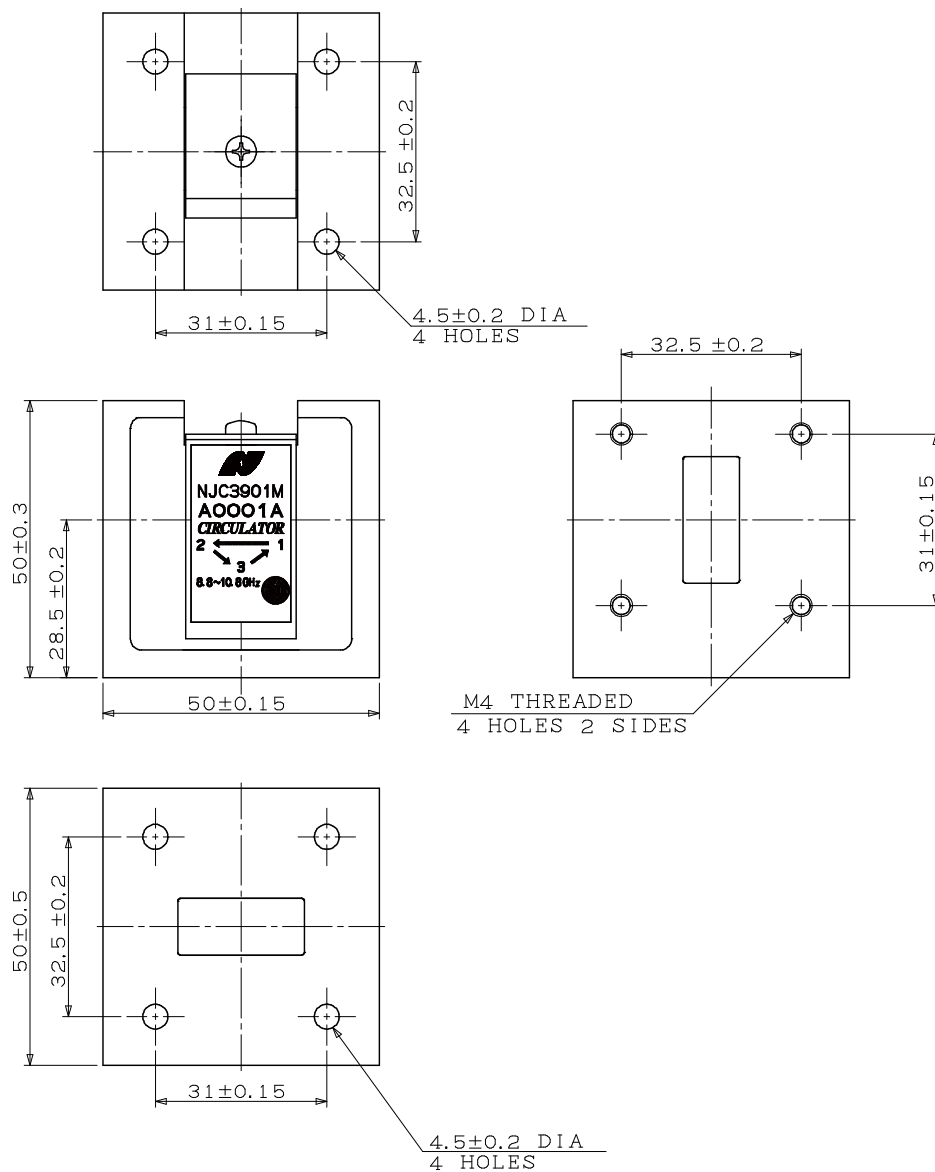
PARAMETERS	TEST CONDITIONS	CODE	LIMIT		
			MINIMUM	MAXIMUM	UNITS
High power input	port①→② f=9.4GHz; Po=30kW; tp=1.0μs; fp=1000pps;	-	-	30	kW
V.S.W.R.	port①	f=8.8GHz	-	1.4	-
	port②	f=9.3GHz	-	1.2	-
	port③	f=9.4GHz	-	1.2	-
	port③	f=9.5GHz	-	1.2	-
Insertion loss	port①→②	f=8.8GHz	-	0.5	dB
		f=9.3GHz	-	0.3	dB
	port②→③	f=9.4GHz	-	0.3	dB
		f=9.5GHz	-	0.3	dB
	port③→①	f=10.8GHz	-	0.7	dB

\* Above Specifications are subject to change without notice.

PARAMETERS	TEST CONDITIONS	CODE	LIMIT			
			MINIMUM	MAXIMUM	UNITS	
Isolation	port②→① port③→② port①→③	-	f=8.8GHz	15	-	dB
			f=9.3GHz	25	-	dB
			f=9.4GHz	25	-	dB
			f=9.5GHz	25	-	dB
			f=10.8GHz	15	-	dB

Note: V.S.W.R., Insertion loss, and Isolation are measured under the conditions, frequency 8.8 to 10.8GHz input signal 0.1mW.

## OUTLINE



(Dimensions are expressed in "mm".)

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