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Released

X band Circulator

Model No. NJC3901M

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Microwave Division

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Title:

Datasheet of NJC3901M

Reference No.:
DS-C3901M

Rev.:
03E

Sheet:
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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

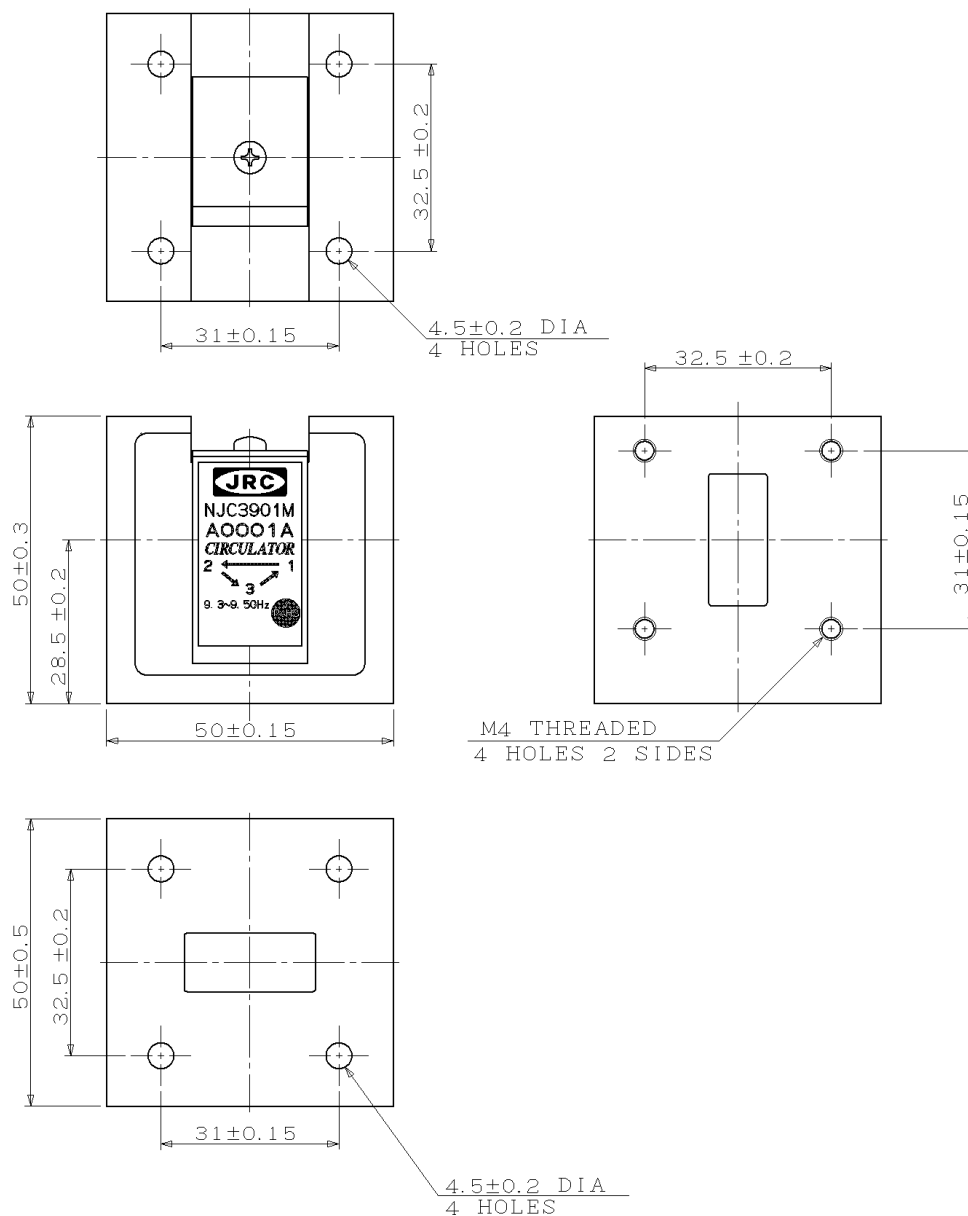
PARAMETERS	Test conditions		Code	Limit		
				Min.	Max.	Units
High power input	port①→②	f=9.4GHz; Po=30kW; tp=1.0μs; fp=1000pps;	-	-	30	kW
V.S.W.R.	port① port② port③	f=8.8GHz	σ	-	1.4	-
		f=9.3GHz		-	1.2	-
		f=9.4GHz		-	1.2	-
		f=9.5GHz		-	1.2	-
		f=10.8GHz		-	1.6	-
Insertion loss	port①→② port②→③ port③→①	f=8.8GHz	Li	-	0.5	dB
		f=9.3GHz		-	0.3	dB
		f=9.4GHz		-	0.3	dB
		f=9.5GHz		-	0.3	dB
		f=10.8GHz		-	0.7	dB

* Above Specifications are subject to change without notice.

PARAMETERS	Test conditions	Code	Limit			
			Min.	Max.	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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