

Date

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**Released**

# S band Circulator

## Model No. NJC3310

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**Microwave Division**

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New Japan Radio Co., Ltd.  
Microwave Division

Title:

Datasheet of NJC3310

Reference No.:  
DS-C3310

Rev.:  
03E

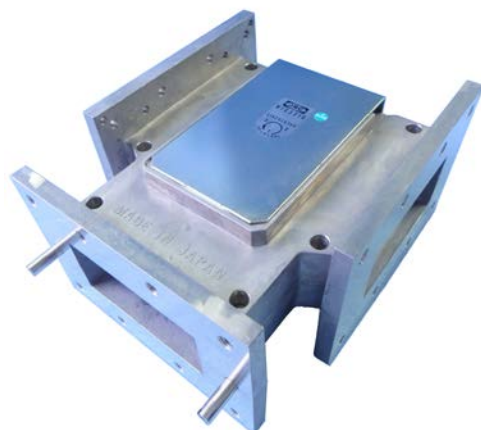
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## ■ GENERAL DESCRIPTION

NJC3310 is designed for the H plane circulator of S band radar system.

It transmits power from the magnetron to the antenna as well as the receiving signal from the antenna to the receiver port.

It is operable at any frequency between 3.00GHz and 3.10GHz.



## ■ ABSOLUTE MAXIMUM RATINGS

PARAMETERS		Minimum	Maximum	Units
Frequency range		3.0	3.1	GHz
Continuous handling power	Peak	-	100	kW
	Average	-	100	W
Storage temperature		-40	+100	°C
Operating temperature		-30	+80	°C
Pulse width		-	1.0	μs
Duty		-	0.001	-

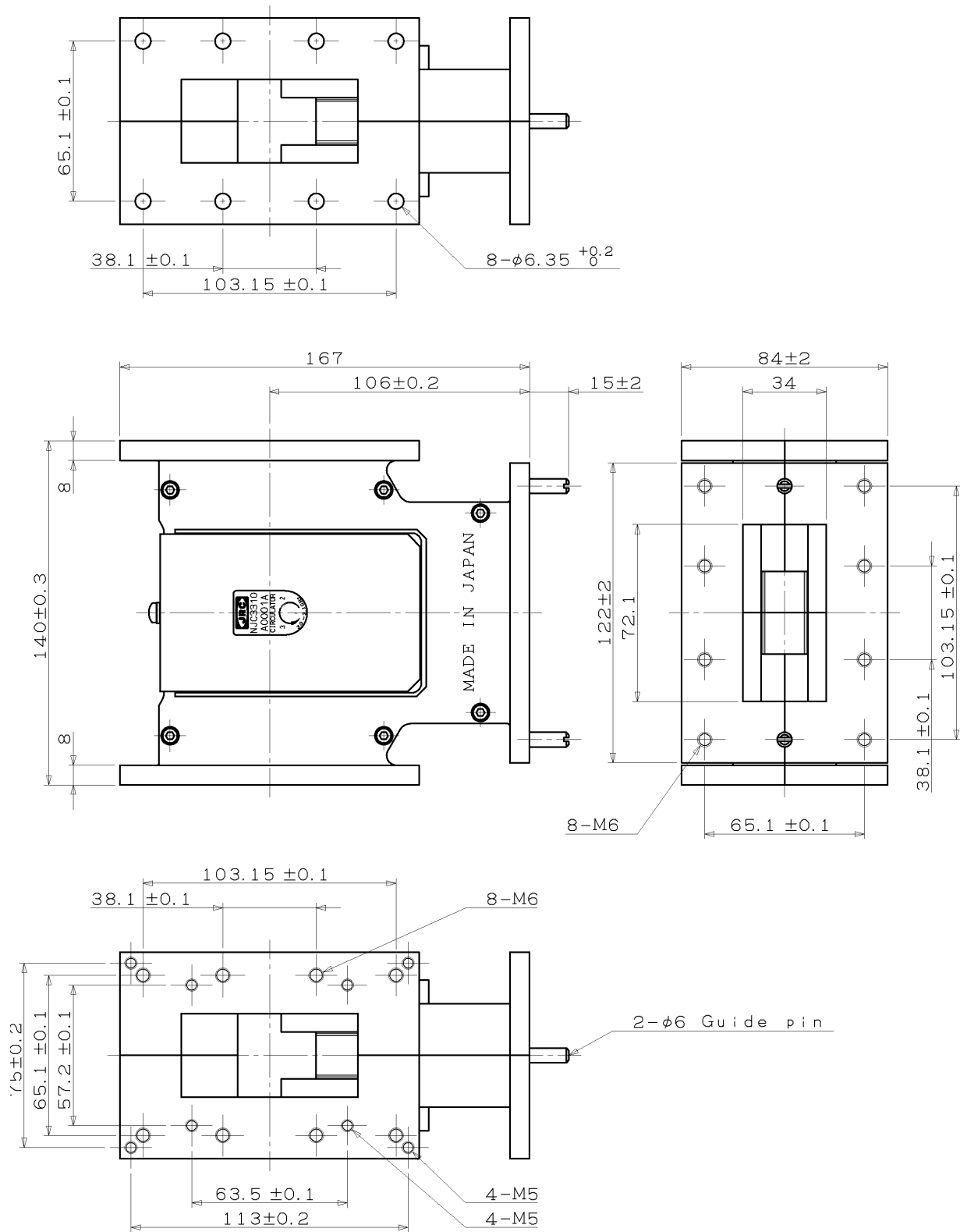
## ■ ELECTRICAL CHARACTERISTICS

PARAMETERS	Test conditions		Code	Limit		
				Min.	Max.	Units
High power input	port①→②	f=3.05GHz; Po=70kW; tp=1.0μs; fp=1000pps;	-	-	70	kW
V.S.W.R.	port①	f=3.00GHz	σ	-	1.2	-
	port②	f=3.05GHz		-	1.2	-
	port③	f=3.10GHz		-	1.2	-
Insertion loss	port①→②	f=3.00GHz	Li	-	0.3	dB
	port②→③	f=3.05GHz		-	0.3	dB
	port③→①	f=3.10GHz		-	0.3	dB
Isolation	port②→①	f=3.00GHz	-	20	-	dB
	port③→②	f=3.05GHz		20	-	dB
	port①→③	f=3.10GHz		20	-	dB

Note: V.S.W.R., Insertion loss, and Isolation are measured under the conditions, frequency 2.8 to 3.3GHz input signal 0.1mW.

\* Above Specifications are subject to change without notice.

## OUTLINE



(Dimensions are expressed in "mm".)

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