

Circulator
Approval Specification**Approval Specification****Complies with Directive 2002/95/EC (RoHS)**

TO:

Part No.: NDI9023

Customer's Part No.:

Application

Please return this copy as a certification of your approval

Checked & Approval by:

Date:

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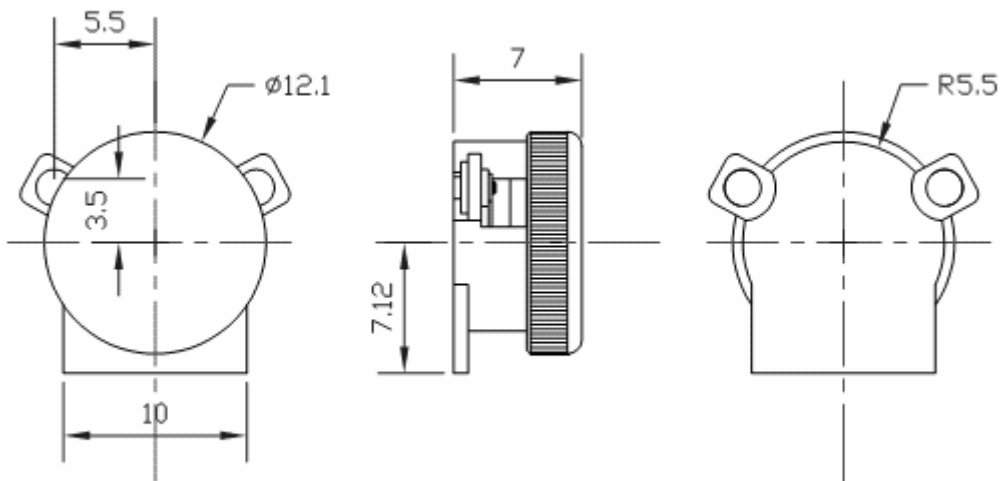
Old Version	Revision Date	Revision Record	Revisor

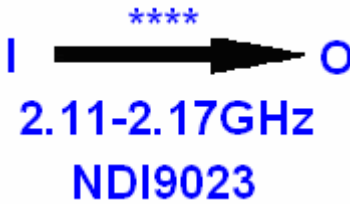

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Features

- Microwave Circulators and Isolators for base station
- Metal Package for **Surface Mounted Technology (SMT)**
- Lead-free Production and **RoHS** Compliance

Package Dimensions



<p style="text-align: center;">Marking</p> 	Top View, Laser Marking							
	"ND":	Manufacturer's mark				"I":	Isolator	
	"9023":	Part number				" . ":	Terminal 1	
	" "	IN	"O"	OUT	"L"	LOAD		Conduct Direction
		2.110-2.170GHz : operating Frequency Range						
	"*":	Lot number (the first two numbers of years and the last two numbers of weeks)						


Maximum Ratings

Rating		Value	Unit
Average Power	P_{AVG}	50	W
Peak Power	P_{PX}	200	W
Reverse Power	P	30	W
Operating Temperature Range	T_A	-40 ~ +100	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C

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Electrical Characteristics

Reference temperature: $T_A = 25\text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

Characteristic	Min.	Typ.	Max.	Unit
Center frequency f_c	2.110		2.170	GHz
Insertion attenuation IL	—		0.3	dB
Isolation 2110~2170MHz	23		—	dB
Isolation 2050~2230MHz	13		—	dB
Input Return Loss			21	
Output Return Loss			21	
IMD(2X15W, 1MHz space)	60	75		
Group Delay			2.0	ns
Group Delay variation			0.5	ns

 **RoHS Compliant**
 **Electrostatic Sensitive Device**

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Our liability is only assumed for the circulator and isolator component(s) per se, not for applications, processes and circuits implemented within components or assemblies.

For questions on technology, prices and delivery, please contact our sales offices or e-mail sales@dquaying.com.