

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

TO:

Part No.: NDI9022

Customer's Part No.:

Application

Please return this copy as a certification of your approval

Checked & Approval by:

Date:

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Prepared by:

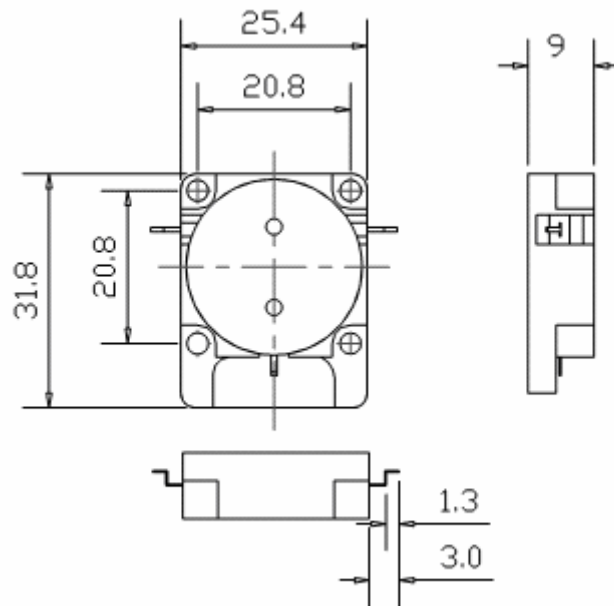
Checked by:

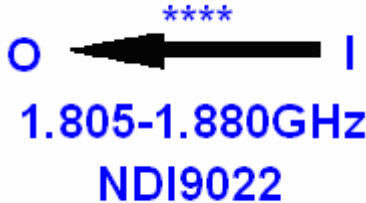

Approved by

Old Version	Revision Date	Revision Record	Revisor

**Circulator
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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


Marking 	Top View, Laser Marking					
	"ND":	Manufacturer's mark			"I":	Isolator
	"9022":	Part number				
	"I"	IN	"O"	OUT		Conduct Direction
		1.805-1.880GHz : 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}	200	W
Peak Power	P_{PX}	1200	W
Reverse Power	P	150	W
Operating Temperature Range	T_A	-40 ~ +95	°C
Storage Temperature Range	T_{stg}	-40 ~ +100	°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	1.805		1.880	GHz
Insertion attenuation	IL	—	0.1	0.15	dB
Isolation	1805~1880MHz	28	30	—	dB
Isolation	1658.5~2026.5MHz	13	20	—	dB
Input VSWR				1.15	
Output VSWR				1.15	
IMD(2X65W, 1MHz space)		75	80		
Input Real	ρ	46.5		53.5	
Input Image	$j\rho$	-4.5		4.5	
Group Delay				2.5	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.