## Features

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


## Package Dimensions



| Marking <br> ネネᄎ* | Top View, Laser Marking |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | "ND": | Manufacturer's mark |  |  | "C": | Circulator |
|  | "9015": | Part number |  |  | $\square$ | Conduct Direction |
| 2.32-2.37 | " ${ }^{\prime}$ | IN | "O" | OUT | "L" | LOAD |
|  |  | $2.320-2.370 \mathrm{GHz}$ : 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 | $P_{\text {AVG }}$ | 150 | W |
| Operating Temperature Range | $T_{\mathrm{A}}$ | $-40 \sim+85$ | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $T_{\text {stg }}$ | $-55 \sim+125$ | ${ }^{\circ} \mathrm{C}$ |

## Electrical Characteristics

Reference temperature:
Terminating source impedance:
Terminating load impedance:
$\mathrm{T}_{\mathrm{A}}=25{ }^{\circ} \mathrm{C}$
$Z_{S}=50 \Omega$
$Z_{L}=50 \Omega$

| Characteristic (-40~+85) |  | Min. | Typ. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Center frequency | $f_{\text {C }}$ | 2.320 |  | 2.370 | GHz |
| Insertion attenuation | IL | - |  | 0.25 | dB |
| Isolation |  | 23 |  | - | dB |
| Input Return Loss |  | 23 |  |  | dB |
| Output Return Loss |  | 23 |  |  | dB |
| IMD(2X40W, 5MHz space) |  | 65 |  |  | dBc |
| (8) RoHS Compliant |  | tatic | ve D |  |  |
|  |  | Min. | Typ. | Max. | Unit |
| Center frequency | $f_{\text {C }}$ | 2.320 |  | 2.370 | GHz |
| Insertion attenuation | IL | - |  | 0.32 | dB |
| Isolation |  | 20 |  | - | dB |
| Input Return Loss |  | 20 |  |  | dB |
| Output Return Loss |  | 20 |  |  | dB |
| IMD(2X40W, 5MHz space) |  | 65 |  |  | dBc |

## Recommended Soldering Profile



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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 winnsky@winnsky.com.

