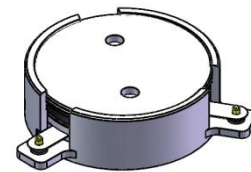




## DP0449C

### 1805MHz to 1880MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2021/4/20	Nick
B	Update IMD and Mechanical Spec.	ZC.Wu	2021/4/26	Nick

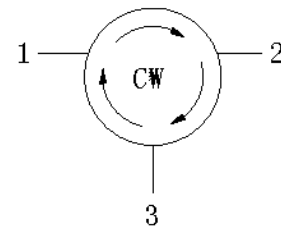


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 1805MHz to 1880MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -55°C to +150°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



### Electrical Specifications:

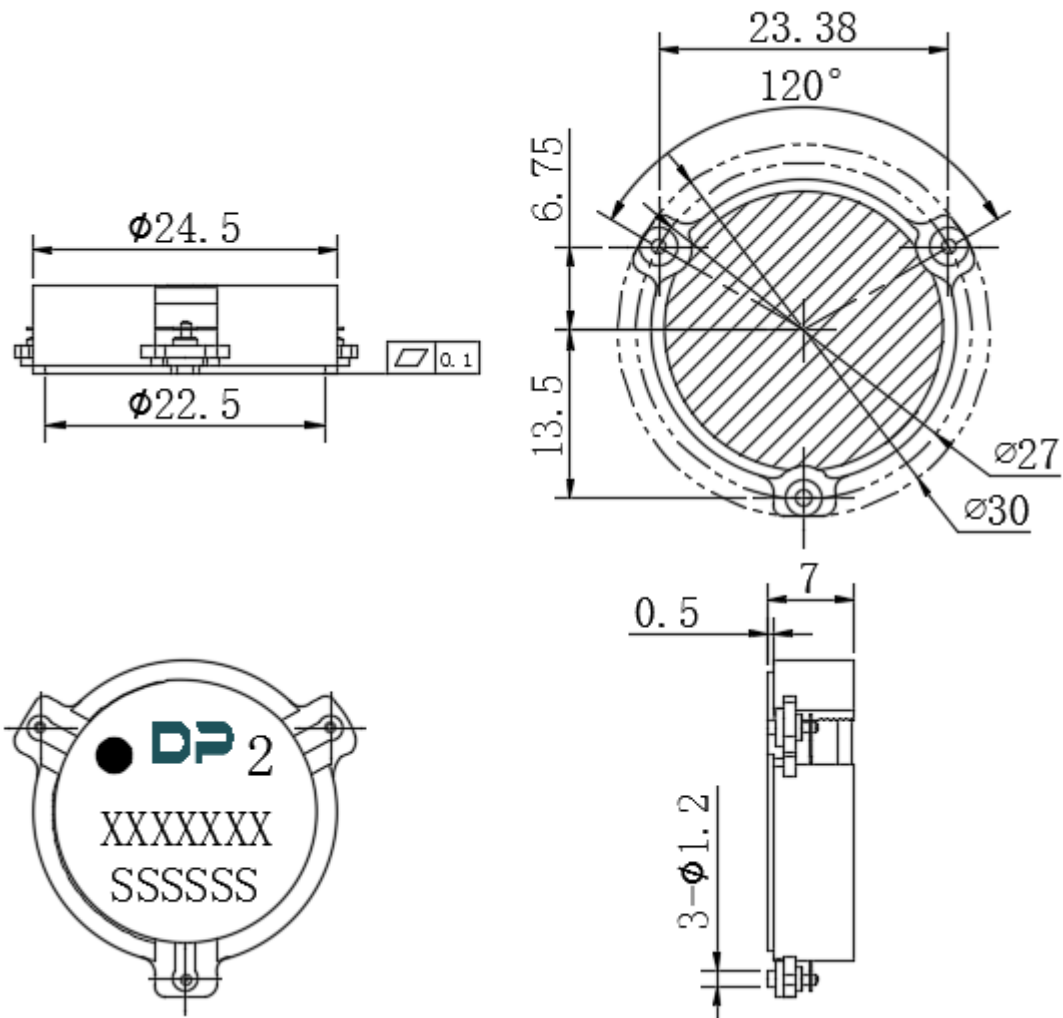
ITEM	SPECIFICATION	
Frequency	1805~1880	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.20@25 $\pm$ 5 $^{\circ}$ C 0.25@-40~+120 $^{\circ}$ C	dB
Isolation (Min.)	25@25 $\pm$ 5 $^{\circ}$ C 23@-40~+120 $^{\circ}$ C	dB
Return Loss (Min.)	25@25 $\pm$ 5 $^{\circ}$ C 23@-40~+120 $^{\circ}$ C	dB
FWD 3rd IMD (Max.)	-70@2x45W,CW tones,spacing 1MHz	dBc
Extend frequency	-	MHz
Isolation of extend frequency	-	dB
Group delay	2	ns
2nd harmonic suppression	10	dBc
3rd harmonic suppression	5	dBc
Power FWD/REV/PEAK	200/-/1600	W
Input Impedance ,real	45 Min 55 Max	$\Omega$
Input Impedance ,imaginary	-6.5j Min +6.5j Max	$\Omega$
Out-off-band resonance point	Resonance point away 1605 MHz to 2080 MHz	

Notes :

1. Exposure to maximum rating conditions for extended periods may reduce device reliability. There is no damage to device with only one parameter set at the limit and all other parameters set at or below their nominal value. Exceeding any of the limits listed here may result in permanent damage to the device.
2. Performance is guaranteed under the conditions listed in this table and over the operating temperature range.



Mechanical Specifications:



Unit : Millimeters

Notes:

1. The housing and pins are silver-plated.
2. Tolerance  $\pm 0.2\text{mm}$  unless otherwise specified.
3. Co-planarity Specification: 0.1mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device.
5. The XXXXXXXX on the label represents the part number
6. The SSSSSS on the label represents the serial number
7. The black dots represent the input ports