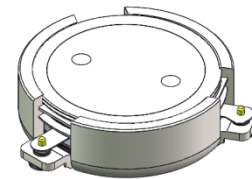




## DP0275C

### 758MHz to 803MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2020/7/28	Nick
B	Updated Mechanical Specifications	ZC.Wu	2020/7/29	Nick
C	Updated Mechanical Specifications	ZC.Wu	2020/8/21	Nick
D	Producing release(Replace the number 1 on the input port of the label with a black dot)	ZC.Wu	2020/10/23	Nick
E	Updated Mechanical Specifications And Electrical Specifications	JieJiang	2020/12/30	Nick
F	Update the requirement of Out Band Resonance and adding Input Impedance spec.	ZC.Wu	2021/1/29	Nick
G	Updated the outline drawing	ZC.Wu	2022/7/28	Nick

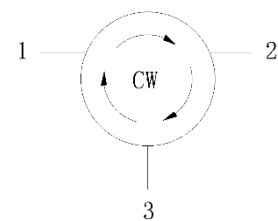


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 758MHz to 803MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -50°C to +150°C
- BeO free & RoHS compliant



Block Diagram



## Electrical Specifications:

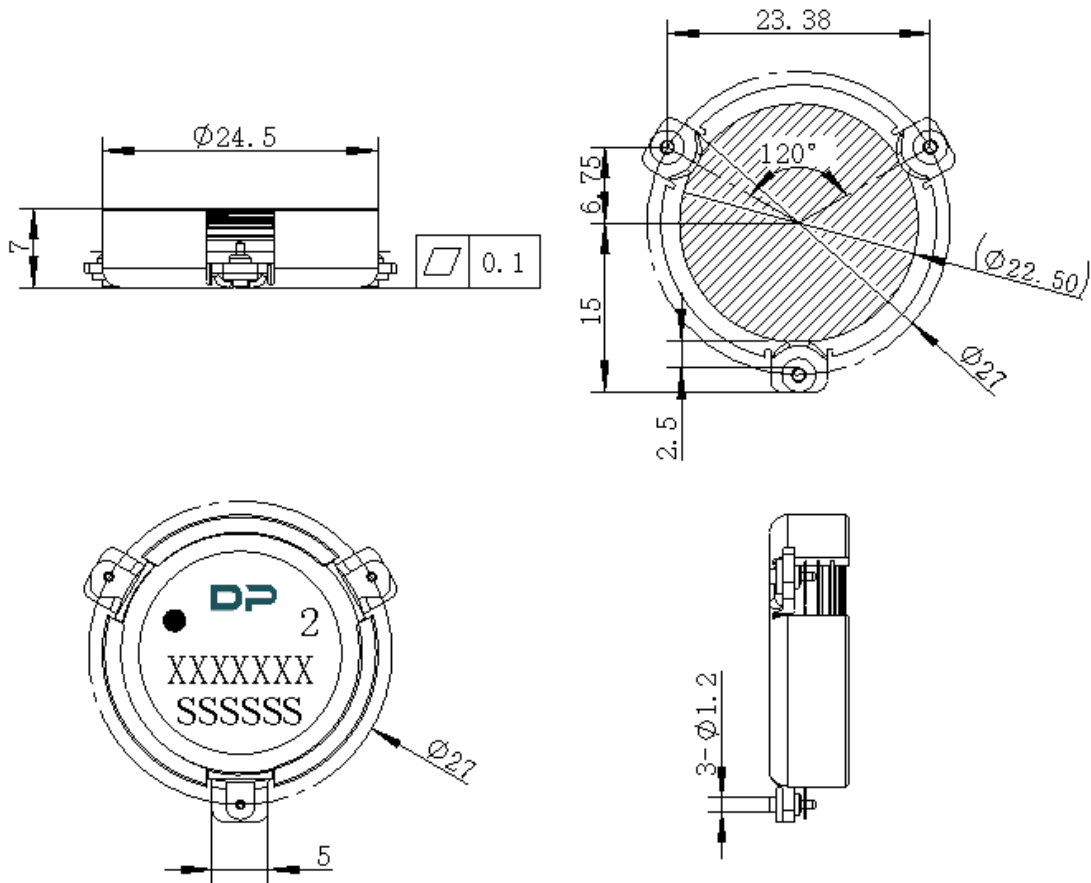
ITEM	SPECIFICATION	
Frequency	758~803	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.25@25 $\pm$ 10 $^{\circ}$ C 0.28@-40~-+85 $^{\circ}$ C 0.28@+85~-+125 $^{\circ}$ C	dB
Isolation (Min.)	24@25 $\pm$ 10 $^{\circ}$ C 22@-40~-+85 $^{\circ}$ C 20@+85~-+125 $^{\circ}$ C	dB
Return Loss (Min.)	24@25 $\pm$ 10 $^{\circ}$ C 22@-40~-+85 $^{\circ}$ C 20@+85~-+125 $^{\circ}$ C	dB
Power FWD/REV/PEAK	250/-/1000	W
IMD (Max.)	-70@2x48dBm, Spacing 5MHz	dBc
Out Band Resonance	Resonance point away 650MHz-910MHz@-40~-+125 $^{\circ}$ C	
Input Impedance ,real	45~55@-40~-+125 $^{\circ}$ C	$\Omega$
Input Impedance ,imaginary	-10j~+10j@-40~-+125 $^{\circ}$ C	$\Omega$
Termination/Attenuator	/	W/dB

### 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  $\pm 0.2$  mm unless otherwise specified.
3. Co-planarity Specification: 0.1 mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device.
5. The XXXXXXX on the label represents the part number
6. The SSSSSS on the label represents the serial number
7. The black dot on the label represents the input port