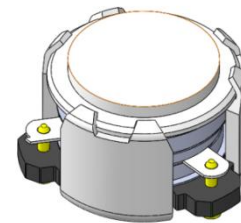




DP0232C

3400MHz to 3800MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2020/05/08	Nick
B	Updated impedance	ZC.Wu	2020/06/17	Nick
C	Replace the number 1 on the input port of the label with a black dot	ZC.Wu	2020/10/10	Nick

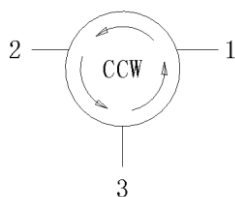


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 3400MHz to 3800MHz
- Operating temperature range: -40°C to +110°C
- Storage temperature range: -65°C to +155°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram

**Electrical Specifications:**

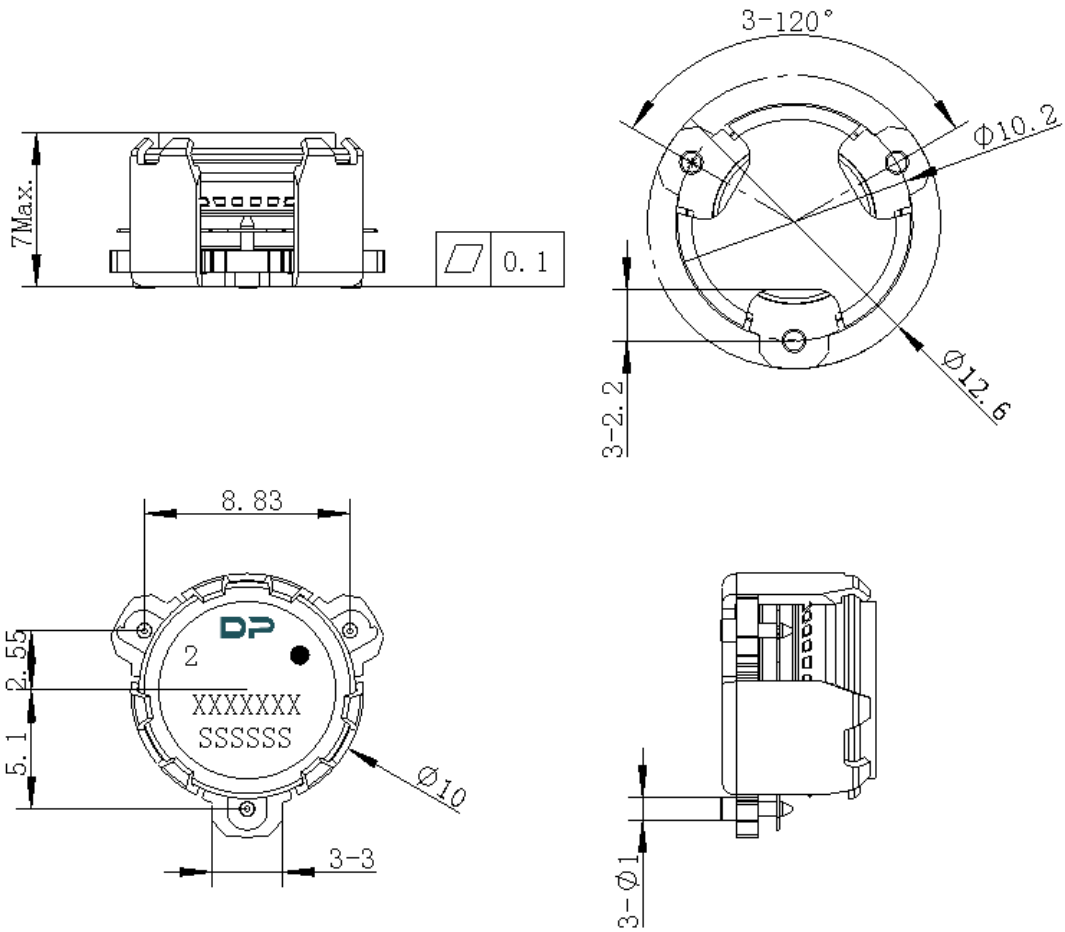
ITEM	SPECIFICATION	
Frequency	3400~3800	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.25@25 \pm 10 $^{\circ}$ C 0.30@-40~+110 $^{\circ}$ C	dB
Isolation (Min.)	20	dB
Return Loss (Min.)	20	dB
3rd IMD (Max.)	-60@2*5W CW,Spacing 1MHz	dBc
Extend frequency	3200~4000	MHz
Group delay	2.0	ns
Phase angle (Input) (Min.)	160	$^{\circ}$
Isolation of extend frequency	14	dB
2nd harmonic suppression	10	dBc
3rd harmonic suppression	5	dBc
Power FWD/REV/PEAK	20/-/160	W
Termination/Attenuator	-	W/dB
Input Impedance ,real	+48~+54@3400MHz Typ:51 @3400MHz +43~+49@3600MHz Typ:46@3600MHz +42.5~+48.5@3800MHz Typ:45.5@3800MHz	Ω
Input Impedance ,imaginary	-6j~0j@3400MHz Typ:-3j@3400MHz -1j~ +5j@3600MHz Typ:2j@3600MHz 0j~ +6j@3800MHz Typ:3j@3800MHz	Ω
Resonance point of out-off-band	3200MHz~4000 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.
3. Performance will not degrade by > 10% (Insertion loss > 20%) with an operating temperature of up to 130 $^{\circ}$ C.



Mechanical Specifications:



Unit : Millimeters

Notes:

1. The housing and pins are silver-plated.
2. Tolerance ± 0.2 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. Part Number format shall be XXXXXXX
6. Serial Number format shall be SSSSSS



Packaging Style:

ITEM	W	A0	B0	C0	K0	D	E	F	F2	P	P0	P2	T
DIM	32	Φ10.4	12.5	4	7.0	Φ1.5	1.75	14.2	28.5	24	4	2	0.5
TOLE	±0.3	±0.2	±0.2	±0.2	±0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

