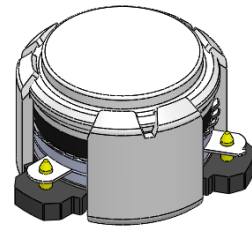




DP0187C

3400MHz to 3600MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating	ZC.Wu	2020/01/13	Nick
B	The total height is changed from 7 Max. to 6.8±0.2	ZC.Wu	2020/02/20	Nick
C	Remove the DP logo from the top cover and replace the number 1 on the input port with a black dot	ZC.Wu	2020/04/01	Nick
D	Optimize the housing and cover to strengthen the reliability	ZC.Wu	2020/6/23	Nick

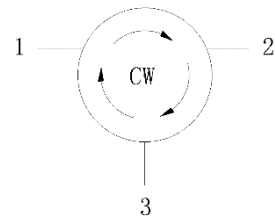


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 3400MHz to 3600MHz
- Operating temperature range: -40°C to +105°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:

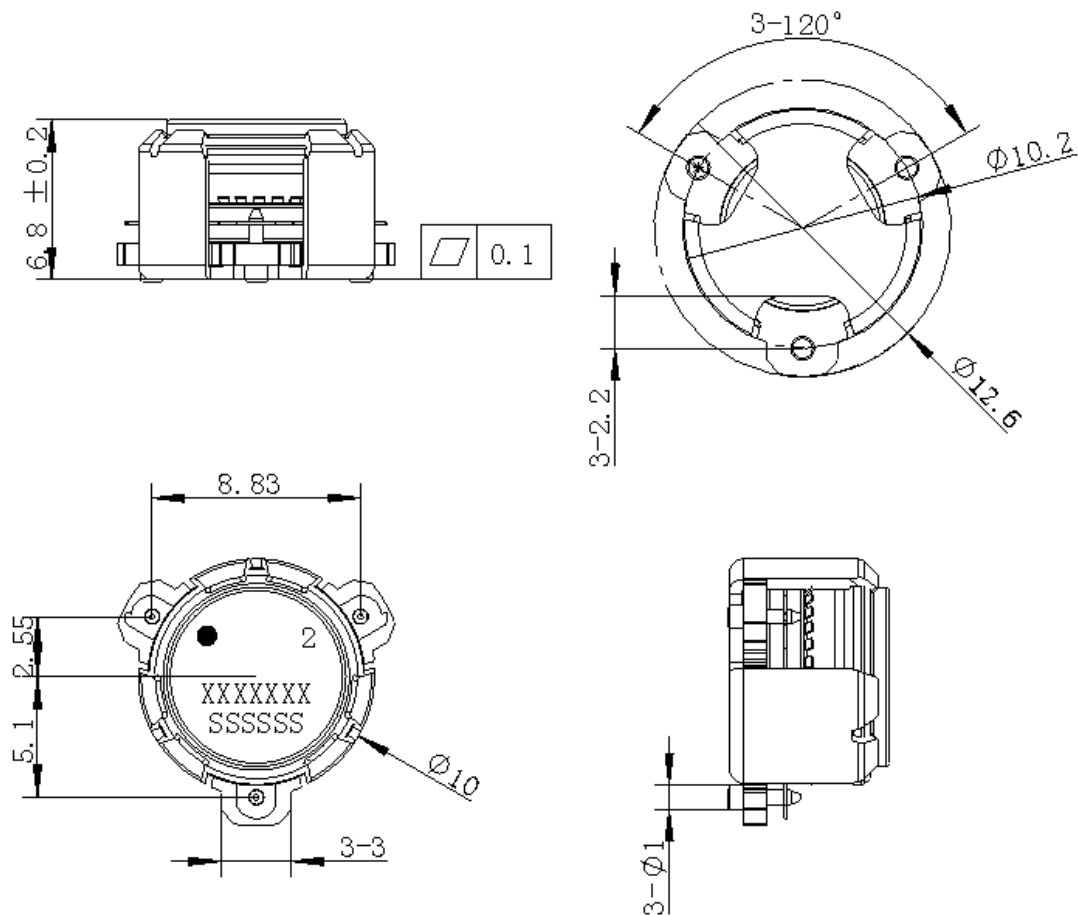
ITEM	SPECIFICATION	
Frequency	3400~3600	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.19@25°C 0.23@-40~+105°C	dB
Isolation (Min.)	21@3400~3600MHz 16@3200~3800MHz	dB
Return Loss (Min.)	22	dB
3rd IMD (Max.)	60@2x5W CW tones, 5MHz spacing	dBc
Group delay	2	ns
2nd harmonic	10	dBc
3rd harmonic	5	dBc
Power FWD/REV/PEAK	20/20/160	W
Termination/Attenuator	/	W/dB
Out Band Resonance	Resonance point away 3200MHz-3800MHz	
Input Impedance ,real	46 Min@3400MHz 55 Max@3400MHz 45 Min@3500MHz 53.5 Max@3500MHz 45 Min@3600MHz 54 Max@3600MHz	Ω
Input Impedance ,imaginary	-6j Min@3400MHz 2j Max@3400MHz -4.5j Min@3500MHz 4j Max@3500MHz -2j Min@3600MHz 5j Max@3600MHz	j Ω

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 °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: 0.1 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 dots represent the input ports.



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

