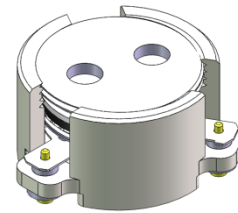




DP0246C

3700MHz to 3980MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2021/7/22	Nick
B	Update the Electrical Spec And Mechanical Spe	Jie.Jiang	2021/12/27	Nick

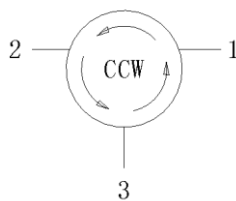


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 3700MHz to 3980MHz
- Operating temperature range: -40°C to +105°C
- Storage temperature range: -40°C to +125°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

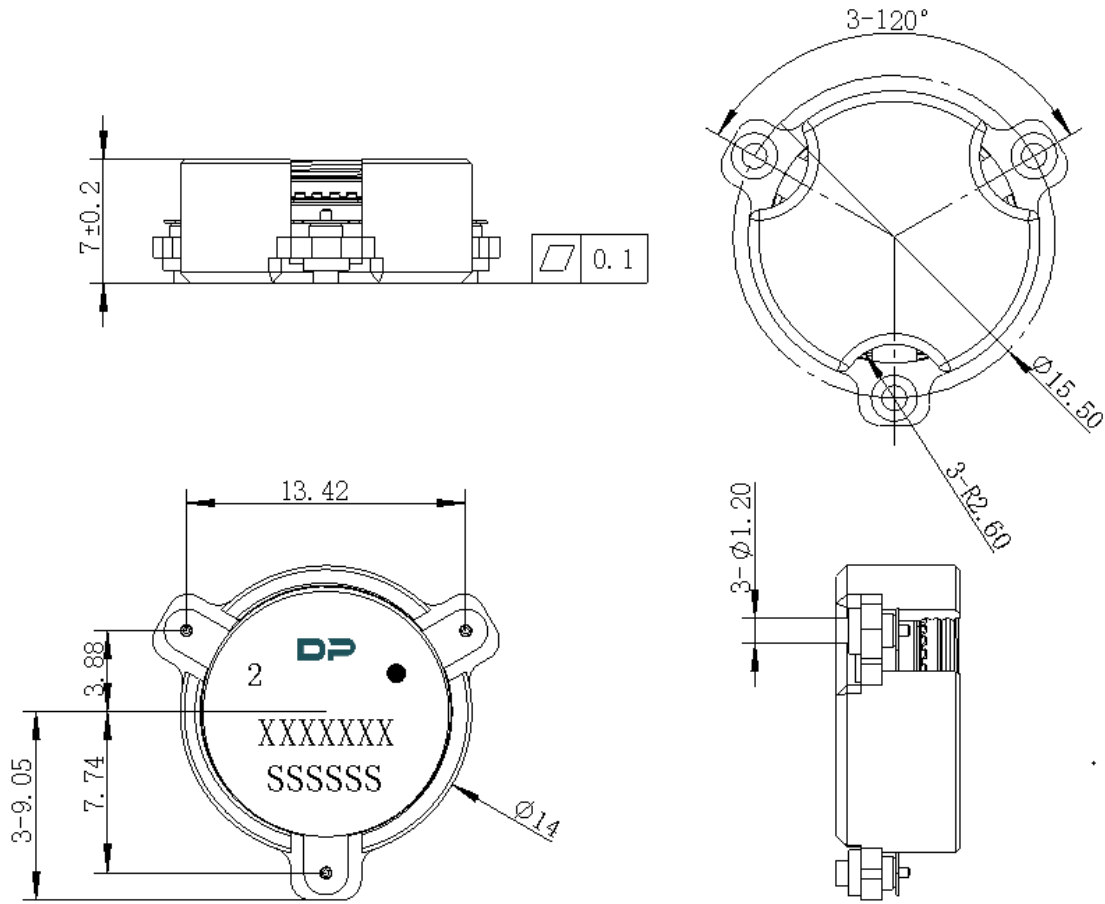
ITEM	SPECIFICATION	
Frequency	3700~3980	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.25	dB
Isolation (Min.)	23	dB
Return Loss (Min.)	25 1@(Frequency band \pm 600MHz)	dB
3rd IMD (Max.)	-69@2x30W CW tones, 5MHz spacing	dBc
Group delay	0.4~2	ns
Harmonic	-60(2xTX@ 63W CW) -60(3xTX@ 63W CW)	dBc
Power FWD/REV/PEAK	100/100/1000	W
Termination/Attenuator	/	W/dB
Reciprocity	-0.05~+0.05 @Delta(S21 / S32) within any 10 °C temperature range	dB
Reciprocity	-1~+1 @Delta(S21 / S32) within any 10 °C temperature range	Deg
Resonance point of out-off-band	3280MHz~4400MHz-	

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 dot on the label represents the input port



Packaging Style:

ITEM	W	A0	B0	K0	D	E	F	F2	P	P0	P2	T
Dim	32	Φ14.3	18.5	7.2	Φ1.5	1.75	14.2	28.5	24	4	2	0.5
TOL	±0.3	±0.2	±0.2	+0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

