

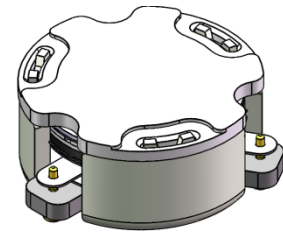


DP3699C

ENG PART:DP-15.5CM-1805T1920-CW

1805MHz to 1920MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
1	Creating datesheet	ZC.Wu	2025/1/14	Nick

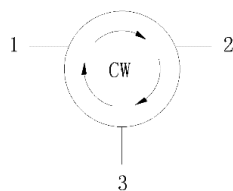


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range:1805MHz to 1920MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -55°C to +135°C
- Small surface-mount package delivered on T&R
- BeO free&RoHS compliant



Block Diagram



Electrical Specifications:

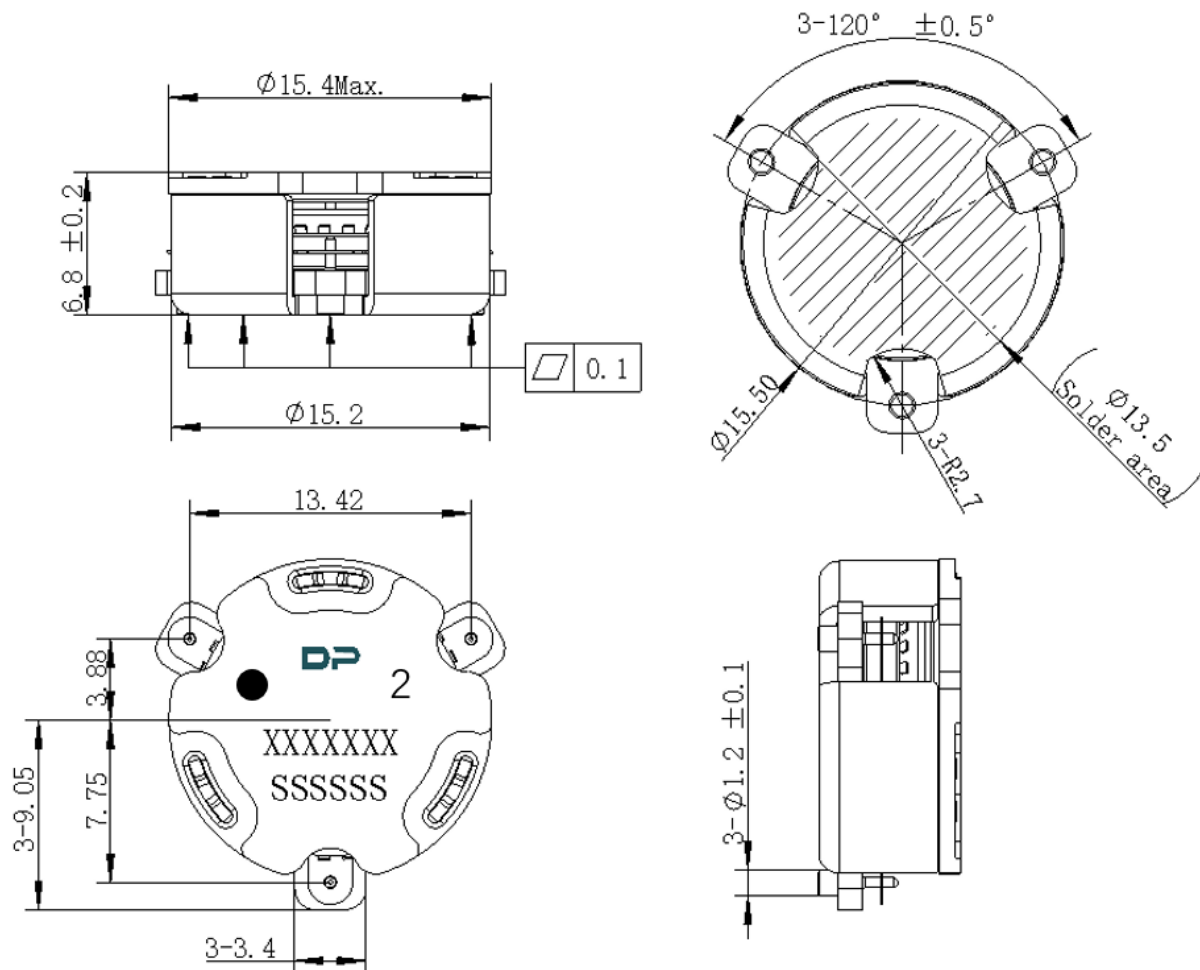
ITEM	SPECIFICATION	
Frequency	1805~1920	MHz
Extend frequency	1710~1980	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	Typ:0.30 0.25@-40~+120°C	dB
Isolation (Min.)	Typ:25 22@-40~+120°C 12@1710~1980MHz	dB
Return Loss (Min.)	Typ:22 20@-40~+120°C	dB
3rd IMD (Max.)	-75@2*20W CW,Spacing5MHz (25±5°C) -70@2*20W CW,Spacing5MHz (-40~120°C)	dBc
Group delay (Max.)	3.0	ns
Ripple of group delay in extend frequency	3.0	ns
2nd harmonic attenuation	-15	dB
3rd harmonic attenuation	-10	dB
2nd harmonic suppression	-60@20W	dBc
3rd harmonic suppression	-60@20W	dBc
Power FWD/REV/PEAK	80/50/700	W
Termination/Attenuator	-	W/dB
Input Impedance ,real	-	Ω
Input Impedance ,imaginary	-	j Ω
Resonance point of out-off-band	-	

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: 0.1mm 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 SSSSS
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	17.8	Φ15.6	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

