

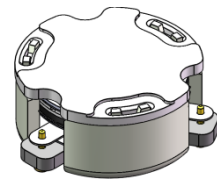


DP3636C

ENG PART:DP-15.5CM-4800T5000-CCW

4800MHz to 5000MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.2	ZZ.Zhu	2024/12/27	Nick

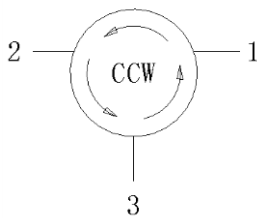


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 4800MHz to 5000MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -55°C to +150°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram

**Electrical Specifications:**

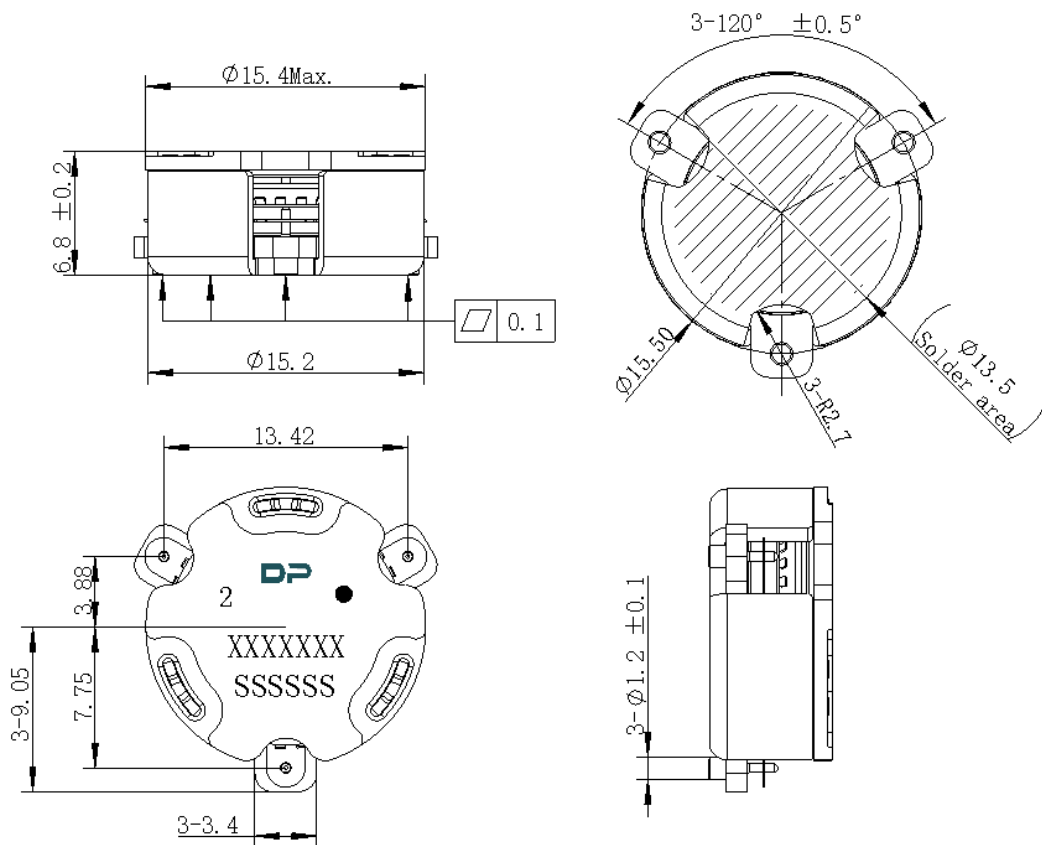
ITEM	SPECIFICATION	
Frequency	4800~5000	MHz
Extend frequency	4650~5150	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.20@25 \pm 5 $^{\circ}$ C 0.25@-40~+125 $^{\circ}$ C	dB
Isolation (Min.)	25(Typ.) 22 14@4650MHz~5150 MHz	dB
Return Loss (Min.)	22 2@5200MHz~5400 MHz	dB
3rd IMD (Max.)	-65(Typ.) -60@2x50W,spacing 1MHz	dBc
Group delay	\leq 2.0	ns
Ripple of group delay in extend frequency	\leq 2.0	ns
2nd harmonic suppression	10	dBc
3rd harmonic suppression	5	dBc
Power FWD/REV/PEAK	100/100/1000	W
Termination/Attenuator	-	W/dB
Input Impedance ,real	46~52 (Typ.49) @4800MHz 47~53 (Typ.50) @4900MHz 48~54 (Typ.51) @5000MHz	Ω
Input Impedance ,imaginary	-4~+2 (Typ.-1) @4800MHz -1~+5 (Typ.2) @4900MHz -2~+4 (Typ.+1) @5000MHz	j Ω
Output Impedance ,real	45~55	Ω
Output Impedance ,imaginary	-5~+5	j Ω
Resonance point of out-off-band	4350MHz~5450MHz-	

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. 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	17.8	Φ15.6	7.2	Φ1.5	1.75	14.2	28.5	24	4	2	0.5
TOL E	±0.3	±0.2	±0.2	±0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

