

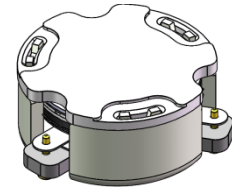


DP3324C

ENG PART: DP-15.5CM-3700T3980-CCW

3700MHz to 3980MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.1	ZC.Wu	2024/8/8	Nick

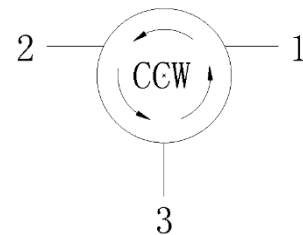


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 3700MHz to 3980MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -50°C to +125°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

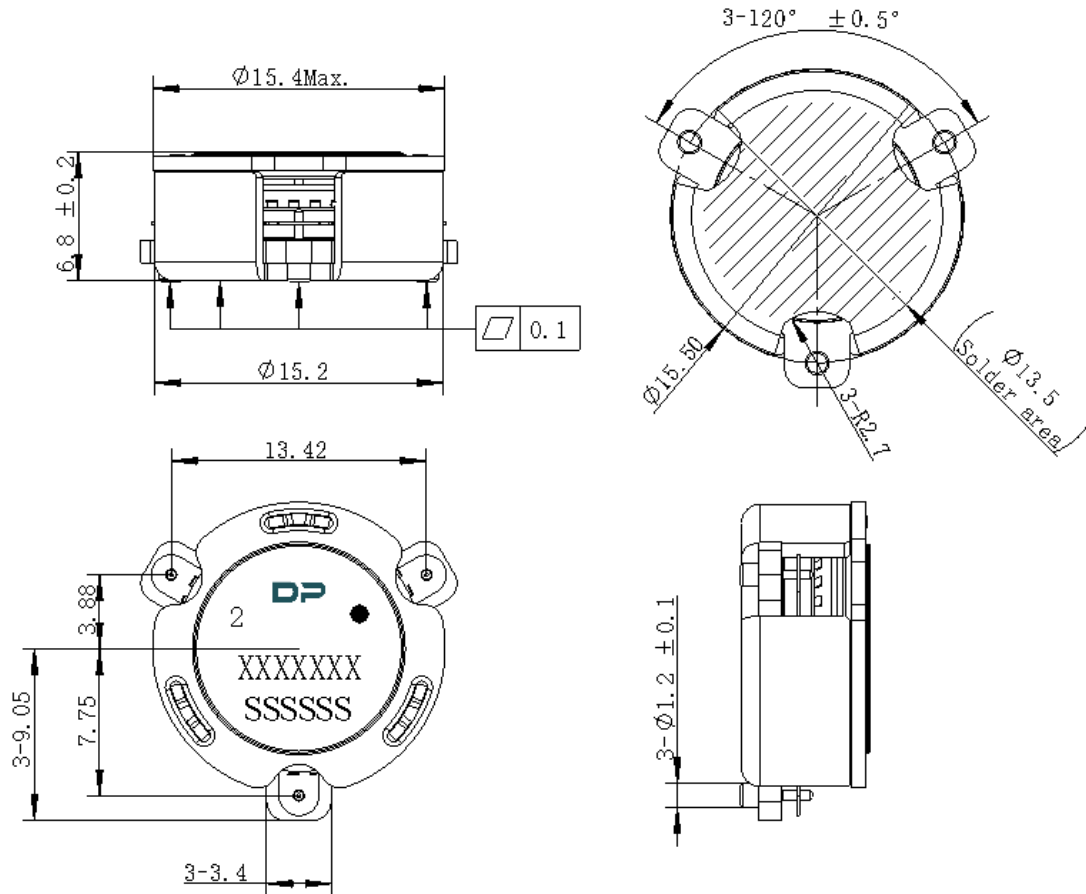
ITEM	SPECIFICATION	
Frequency	3700~3980	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.20@-40~+115 $^{\circ}$ C 0.25@+115~+125 $^{\circ}$ C	dB
Isolation (Min.)	23	dB
Return Loss (Min.)	23@0~125 $^{\circ}$ C 20@-40~0 $^{\circ}$ C	dB
3rd IMD (Max.)	-69@2x50W , 5MHz spacing	dBc
5th IMD (Max.)	-79@2x50W , 5MHz spacing	dBc
Harmonics	60@2 x TX (100W CW) 60@ 3 x TX (100W CW)	dBc
Out of bandattenuation	20@2xTX 10@3xTX 5@nxTX	dB
Group delay	0.4~2.0	ns
Reciprocity	-0.05~+0.05 @Delta(S21 / S32) within any 10 $^{\circ}$ C temperature range	dB
	-1~+1 @Delta(S21 / S32) within any 10 $^{\circ}$ C temperature range	Deg
Deviation from nominal delay over temperature range	± 0.05 (Measured with fixed frequency)	ns
Power FWD/REV/PEAK	150/150/1500	W
Max voltage rating	1080	V
Impedance (real)	50 ± 2.5 (the reference point at Isolator Pad)	Ω
Impedance (Imaginary)	$\pm 2.5j$ (the reference point at Isolator Pad)	Ω
Resonance out of	3140~4540	MHz
Termination/Attenuator	/-	W/dB

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.



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	44	Φ15.5	Φ18.3	7.3	Φ1.5	1.75	20.2	40.5	28	4	2	0.5
TOLE	±0.3	±0.2	±0.2	±0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

