

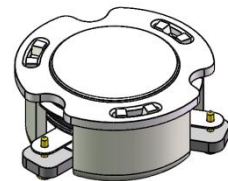


DP2471C

ENG PART:DP-15.5CM-2400T2500-CW

2400MHz to 2500MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
1	Creating datasheet	ZC.Wu	2023/3/3	Nick
2	Changed the Power FWD/REV from 150/150 to 100/100	ZC.Wu	2023/5/5	Nick

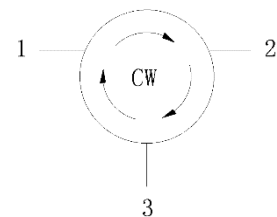


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 2400MHz to 2500MHz
- Operating temperature range: 0°C to +100°C
- Storage temperature range: -55°C to +125°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

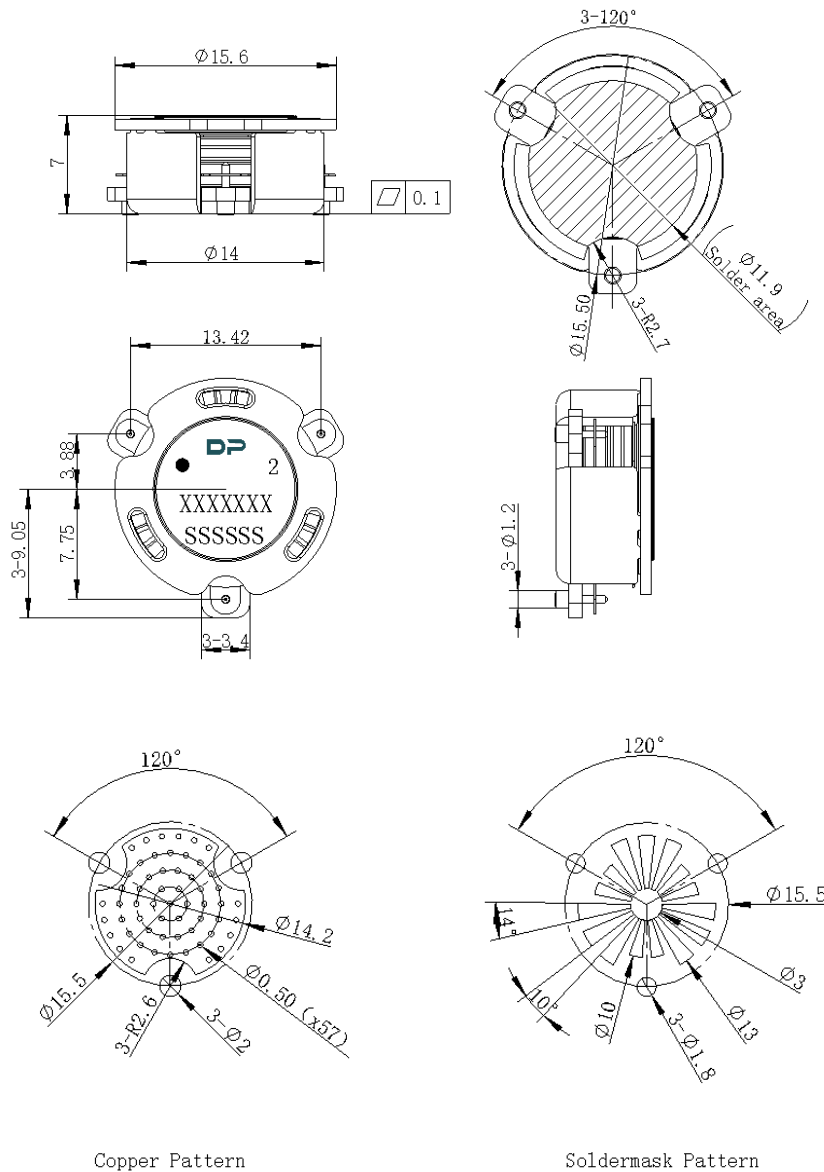
ITEM	SPECIFICATION	
Frequency	2400~2500	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.20@25 \pm 5 $^{\circ}$ C 0.25@0~+100 $^{\circ}$ C	dB
Isolation (Min.)	25.0@25 \pm 5 $^{\circ}$ C 23.0@0~+100 $^{\circ}$ C	dB
Return Loss (Min.)	25.0@25 \pm 5 $^{\circ}$ C 23.0@0~+100 $^{\circ}$ C	dB
3rd IMD (Max.)	-65@2x15W CW tones, 1MHz spacing Typ.: -70@2x15W CW tones, 1MHz spacing	dBc
Extend frequency	/	MHz
Group delay	/	ns
2nd harmonic	/	dBc
3rd harmonic	/	dBc
Power FWD/REV/PEAK	100/100/600	W
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.
3. Performance will not degrade by > 10% (Insertion loss > 20%) with an operating temperature of up to 130 $^{\circ}$ C.



Mechanical Specifications:



Copper Pattern

Soldermask Pattern

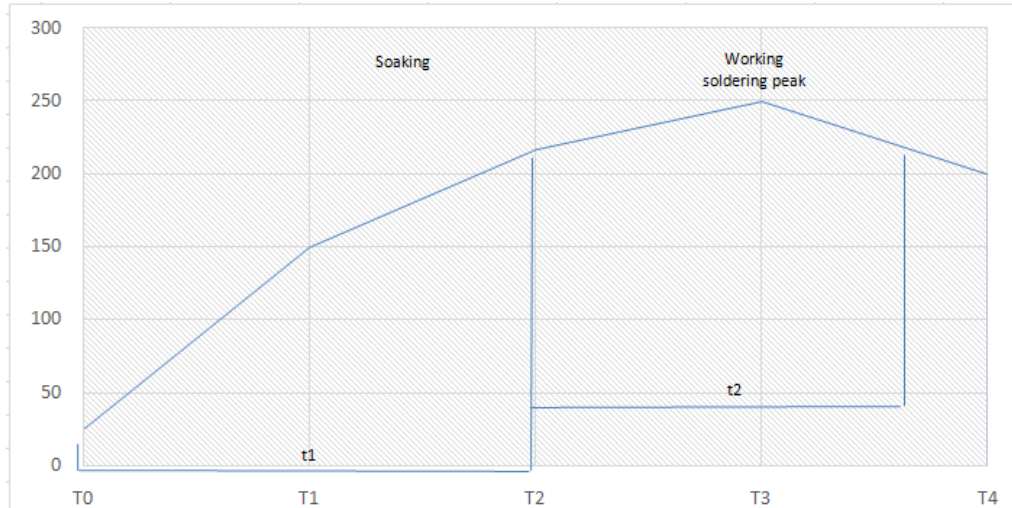
Unit: Millimeters

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



RECOMMENDED REFLOW PROFILE:



Temperature zone	T0	T1	T2	T3	T4
Temp. (°C)	25	150	210	240-260	200
Time (s)	t1		t2		
	160-200		60-180		

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

