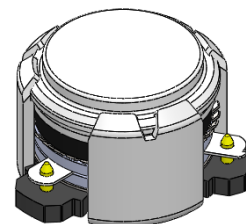




DP0598C

3700MHz to 3980MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2021/8/4	Nick

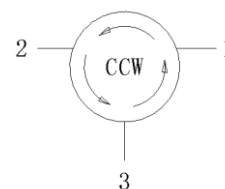


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 3700MHz to 3980MHz
- Operating temperature range: -40°C to +105°C
- Storage temperature range: -50°C to +120°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

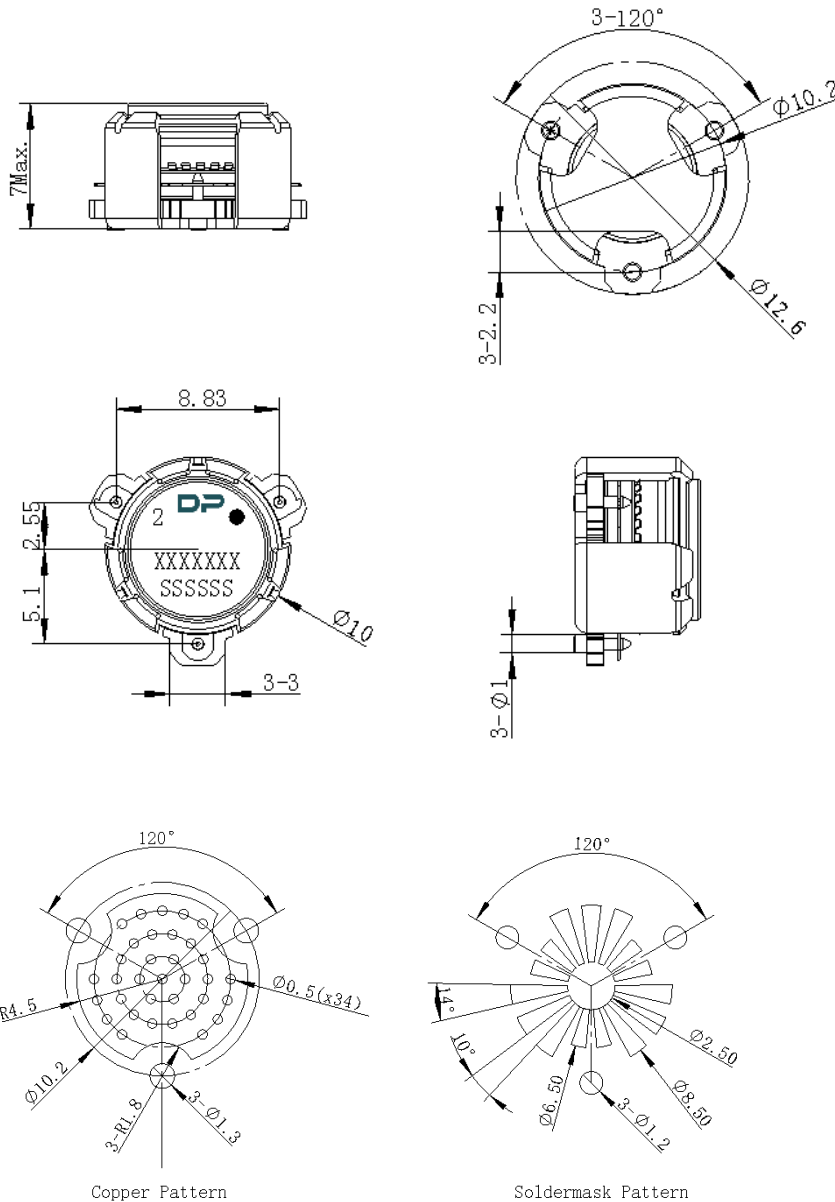
ITEM	SPECIFICATION	
Frequency	3700~3980	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.25@25 \pm 5 $^{\circ}$ C 0.30@-40~105 $^{\circ}$ C	dB
Isolation (Min.)	23.0@25 \pm 5 $^{\circ}$ C 21.0@-40~105 $^{\circ}$ C	dB
Return Loss (Min.)	23.0@25 \pm 5 $^{\circ}$ C 21.0@-40~105 $^{\circ}$ C	dB
3rd IMD (Max.)	-65@2x5W CW tones, 5MHz spacing	dBc
Group delay	2	ns
2nd harmonic	/	dBc
3rd harmonic	/	dBc
Power FWD/REV/PEAK	30/30/200	W
Termination/Attenuator	/	W/dB
Input Impedance ,real	/	Ω
Input Impedance ,imaginary	/	j Ω

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:



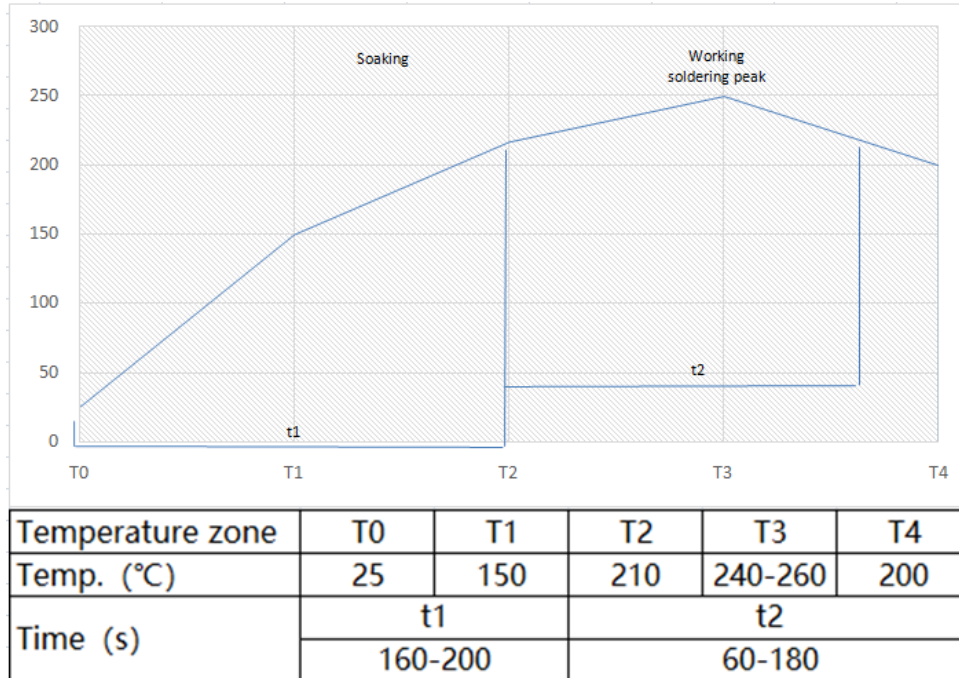
Notes:

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 XXXXXXXX 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

Unit: Millimeters



RECOMMENDED REFLOW PROFILE:



PackagingStyle:

ITEM	W	A0	B0	C0	K0	D	E	F	F2	P	P0	P2	T
DIM	32	Φ10.4	12.5	4	7.0	Φ1.5	1.75	14.2	28.5	24	4	2	0.5
TOLE	±0.3	±0.2	±0.2	±0.2	±0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

