

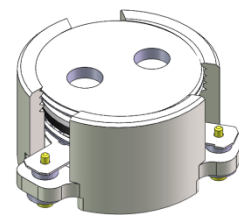


DP3087C

ENG PART: DP-12.5CM-5300T5900-CW

5300MHz to 5900MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZZ.Zhu	2024/4/16	Nick

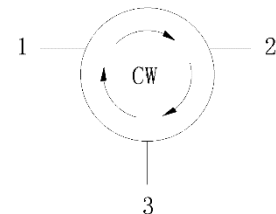


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 5300MHz to 5900MHz
- Operating temperature range: -40°C to +85°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:

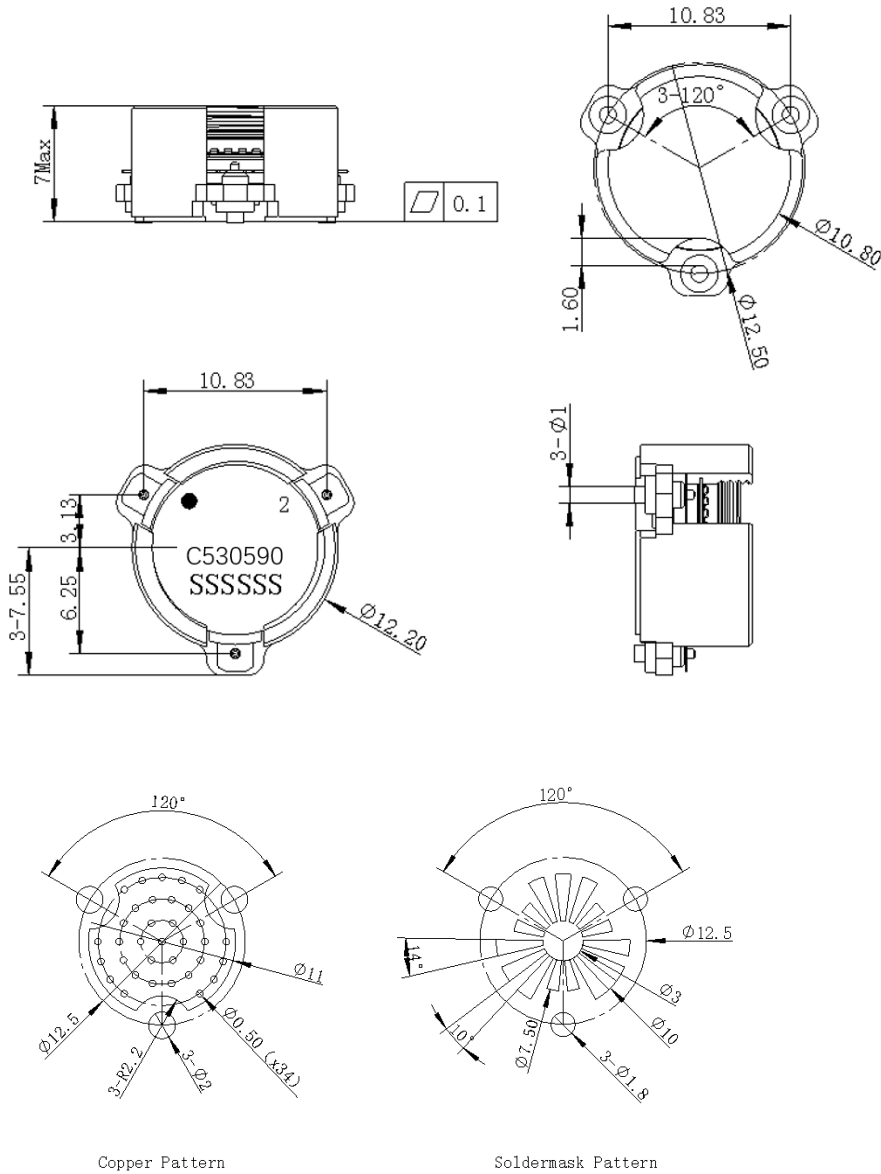
ITEM	SPECIFICATION	
Frequency	5300~5900	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.40@25°C 0.50@-40~+85°C	dB
Isolation (Min.)	20@25°C 18@-40~+85°C	dB
Return Loss (Min.)	20@25°C 18@-40~+85°C	dB
FWD 3rd IMD (Max.)	/	dBc
Group delay	/	ns
2nd harmonic suppression	/	dBc
3rd harmonic suppression	/	dBc
Power FWD/REV/PEAK	50/-/400	W
Termination/Attenuator	/	W/dB
Input Impedance ,real	/	Ω
Input Impedance ,imaginary	/	Ω
Output Impedance ,real	/	Ω
Output Impedance ,imaginary	/	Ω
Out-of-band resonance point	/	
Test connector	/	

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:



Copper Pattern

Soldermask Pattern

Unit: Millimeters

Notes:

1. The housing and pins are silver-plated.
2. Tolerance $\pm 0.2\text{mm}$ 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