



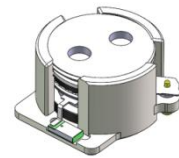
## DP0412S

### 1805MHz to 2170MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	Jie.Jiang	2021/1/21	Nick

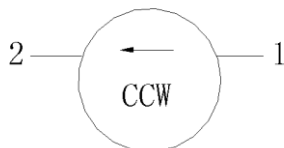
#### Applications:

- Wireless Infrastructure
- Power Amplifier



#### Features:

- Operating frequency range: 1805MHz to 2170MHz
- Operating temperature range: -40°C to +90°C
- Storage temperature range: -55°C to +125°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



**Electrical Specifications:**

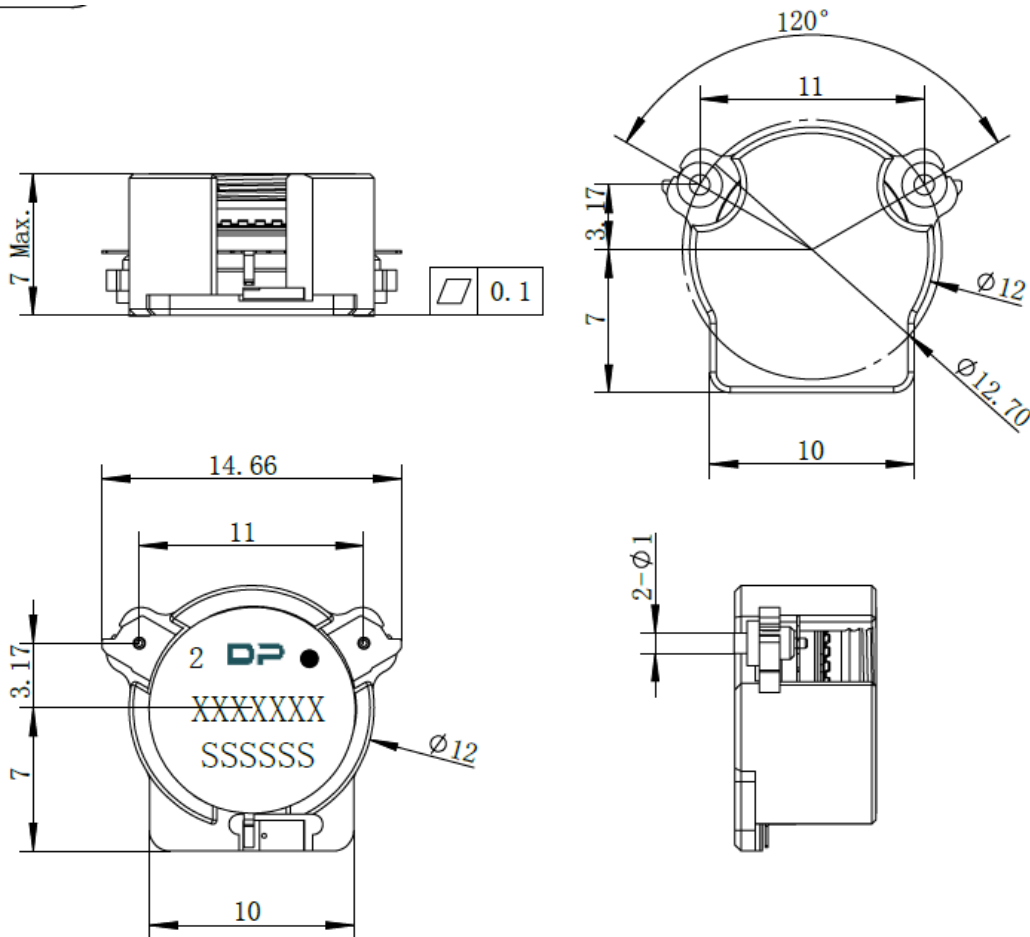
ITEM	SPECIFICATION	
Frequency	1805~2170	MHz
Direction	CCW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.5	dB
Isolation (Min.)	17@1805~2170MHz 12@1740~2260MHz	dB
Return Loss (Min.)	17	dB
Input Impedance ,real	36 Min 50Typ 69 Max	$\Omega$
Input Impedance ,imaginary	-16j Min +16j Max	j $\Omega$
3rd IMD (Max.)	55@2x15W CW tones, 5MHz spacing	dBc
Group delay	2	ns
Group delay Variation	1	ns
2nd harmonic	10	dBc
3rd harmonic	5	dBc
Power FWD/REV/PEAK	50/4/120	W
Termination/Attenuator	20/-	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 °C.



### Mechanical Specifications:



Unit : Millimeters

#### Notes:

1. The housing and pins are silver-plated.
2. Tolerance  $\pm 0.2$  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. Part Number format shall be XXXXXXXX
6. Serial Number format shall be SSSSSS
7. The black dot on the label represents the input port