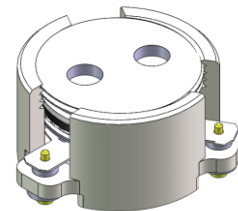




## DP0008C

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

Revision A

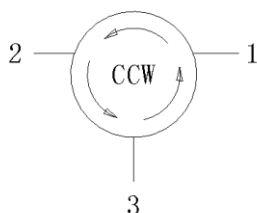


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 1805MHz to 2170MHz
- Operating temperature range: -40°C to +110°C
- Storage temperature range: -55°C to +150°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



CCW ORIENTATION



**Electrical Specifications:**

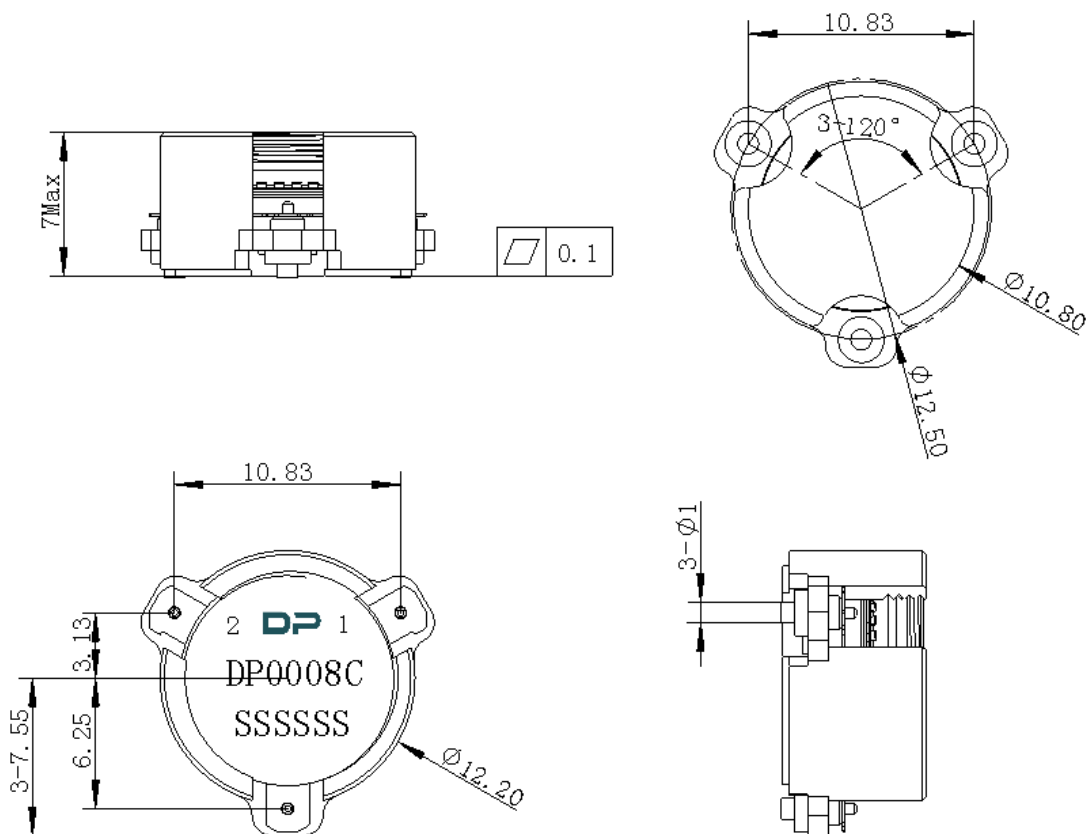
ITEM	SPECIFICATION	
Frequency	1805~2170	MHz
Direction	CCW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.40@25°C 0.45@-40~+110°C	dB
Isolation (Min.)	18	dB
Return Loss (Min.)	17.7	dB
3rd IMD (Max.) (-40~+90°C)	60@2x10W CW tones, 1MHz spacing	dBc
Extend frequency	1655~2320	MHz
Ripple of group delay in extend frequency	2	ns
Isolation of extend frequency	10	dB
2nd harmonic	10	dBc
3rd harmonic	5	dBc
Power FWD/REV/PEAK	50/-/400	W
Termination/Attenuator	/	W/dB
Input Impedance ,real @1805~1880MHz	44 Min 52.5 Typ 58 Max	$\Omega$
Input Impedance ,real @2110~2170MHz	41 Min 47.5Typ 59 Max	$\Omega$
Input Impedance ,imaginary @1805~1880MHz	-8.5j Min +7.5j Max	j $\Omega$
Input Impedance ,imaginary @2110~2170MHz	-1j Min +7j Max	j $\Omega$
Output Impedance ,real	41Min 50 Typ 59Max	$\Omega$
Output Impedance ,imaginary	-8j Min +7j Max	j $\Omega$
Out-of-band resonance point	Resonance point away 1405 MHz to 2570 MHz	

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: 0.1mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device.
5. Serial Number format shall be SSSSSS