

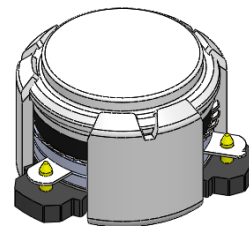


## DP0678C

### ENG PART:DP-10.2CM-2300T2400-CCW

2300MHz to 2400MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2021/10/8	Nick

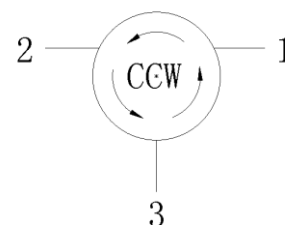


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 2300MHz to 2400MHz
- 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



Block Diagram



**Electrical Specifications:**

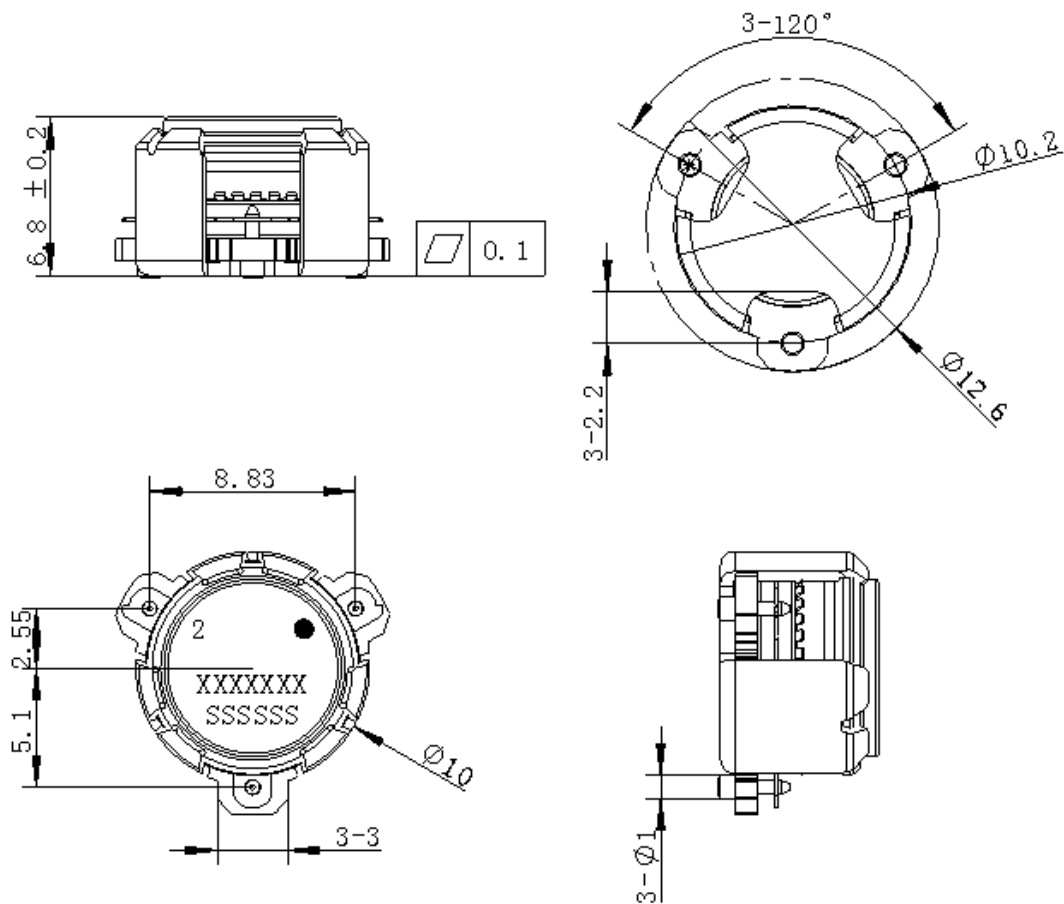
ITEM	SPECIFICATION	
Frequency	2300~2400	MHz
Extend frequency	2200~2500	MHz
Direction	CCW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.3	dB
Isolation (Min.)	20@2300~2400MHz 14@2200~2500MHz	dB
Return Loss (Min.)	22	dB
3rd IMD (Max.)	-60@2x5W CW tones, 5MHz spacing	dBc
Group delay	2	ns
2nd harmonic suppression	10	dBc
3rd harmonic suppression	5	dBc
Power FWD/REV/PEAK	20/20/160	W
Termination/Attenuator	/	W/dB
Resonance point of out-off-band	2200MHz-2500MHz	
Input Impedance ,real	42.5 Min 51 Typ. 58 Max	$\Omega$
Input Impedance ,imaginary	-10j Min 6j Max	j $\Omega$

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. The **XXXXXX** on the label represents the part number
6. The **SSSSSS** on the label represents the serial number
7. The black dots represent the input port.



Packaging Style:

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

