

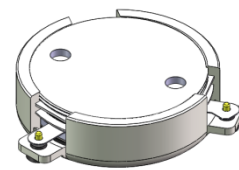


## DP3660C

### ENG PART:DP-27CM-1805T2170-CCW

1805MHz to 2170MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.1	ZZ.Zhu	2024/12/25	Nick

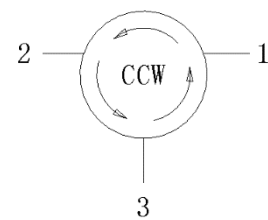


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 1805 to 1880MHz & 2110 to 2170MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -65°C to +150°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram

**Electrical Specifications:**

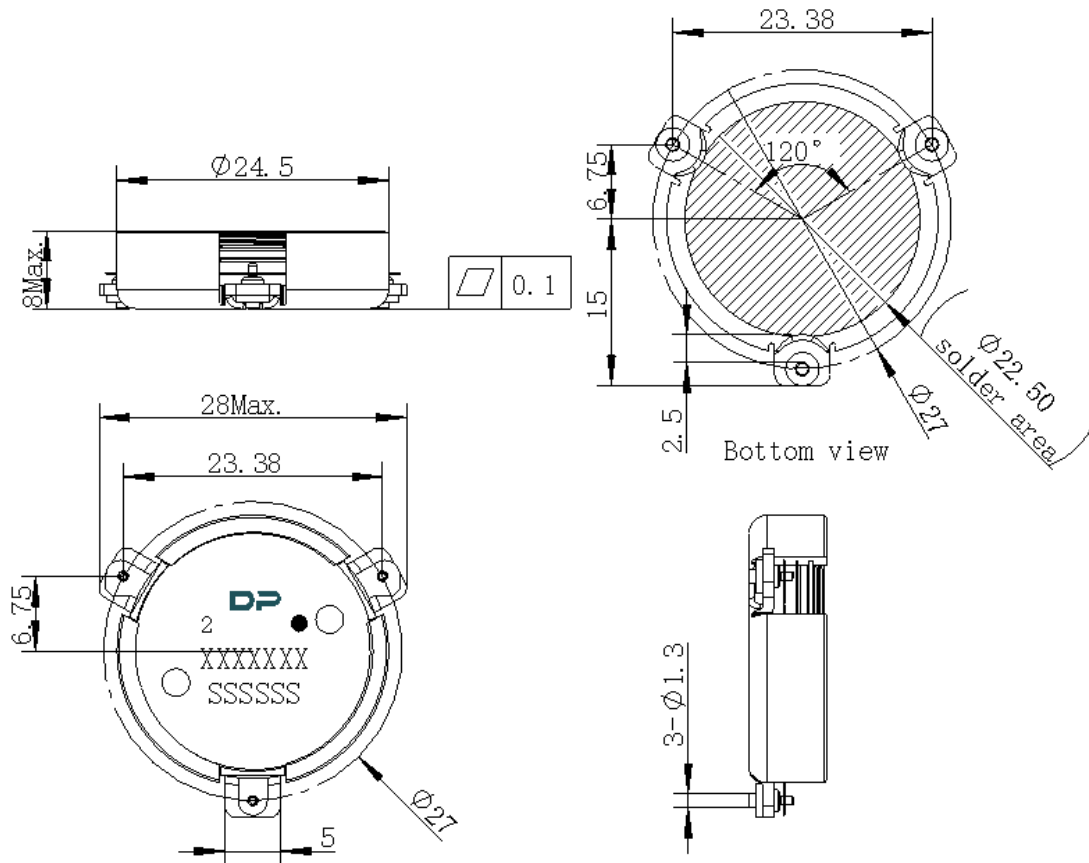
ITEM	SPECIFICATION	
Frequency	1805~2170	MHz
Operating Frequency	1805~1880 & 2110~2170	MHz
Direction	CCW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.23@1805~1880MHz & 2110~2170MHz	dB
Isolation (Min.)	20@1805-2170MHz 23@1805~1880MHz & 2110~2170MHz	dB
Return Loss (Min)	23@0~125°C (1805~1880MHz & 2110~2170MHz) 20@-40~0°C (1805~1880MHz & 2110~2170MHz)	dB
3rd IMD (Max.)	-69@2x75W (1805~1880MHz & 2110~2170MHz)	dBc
5rd IMD (Max.)	-79@2x75W (1805~1880MHz & 2110~2170MHz)	dBc
Group delay	2.8	ns
Harmonics	0@2x f 150W CW -10@3x f 150W CW -10@4x f 150W CW -35@5x f 150W CW -25@6x f 150W CW -25@7x f 150W CW	dBm
Out of band attenuation	10@2x f 10@3x f@1805~1880MHz 5@3x f@2110~2170MHz 5@nx f (n=order of in- band frequency multiple)	dB
Group delay	2.8	ns
Deviation from nominal delay	$\pm 0.05$	ns
Power FWD/REV/PEAK	200/100/1500	W
Max voltage rating	1080	V
Impedance control (the reference point at Isolator Pad) , real	-	$\Omega$
Impedance control (the reference point at Isolator Pad) , imaginary	-	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 the operating temperature 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. PartNumber, Lot Code, and Port Designation are printed on the top side of device
5. The **XXXXC** on the label represents the last five digits of the PartNumber.
6. Date code is in format **YYWW**
7. The black dot on the label represents the input port