

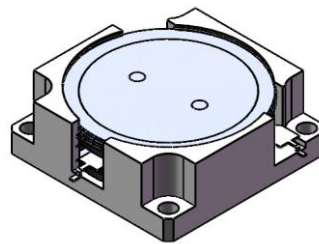


DP2809C

ENG PART:DP-31.8X31.8CD-617T756-CW

617MHz to 756MHz Single-Junction Drop-in Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.1	ZZ.Zhu	2023/10/18	Nick

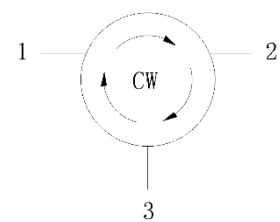


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 617MHz to 756MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -55°C to +155°C
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

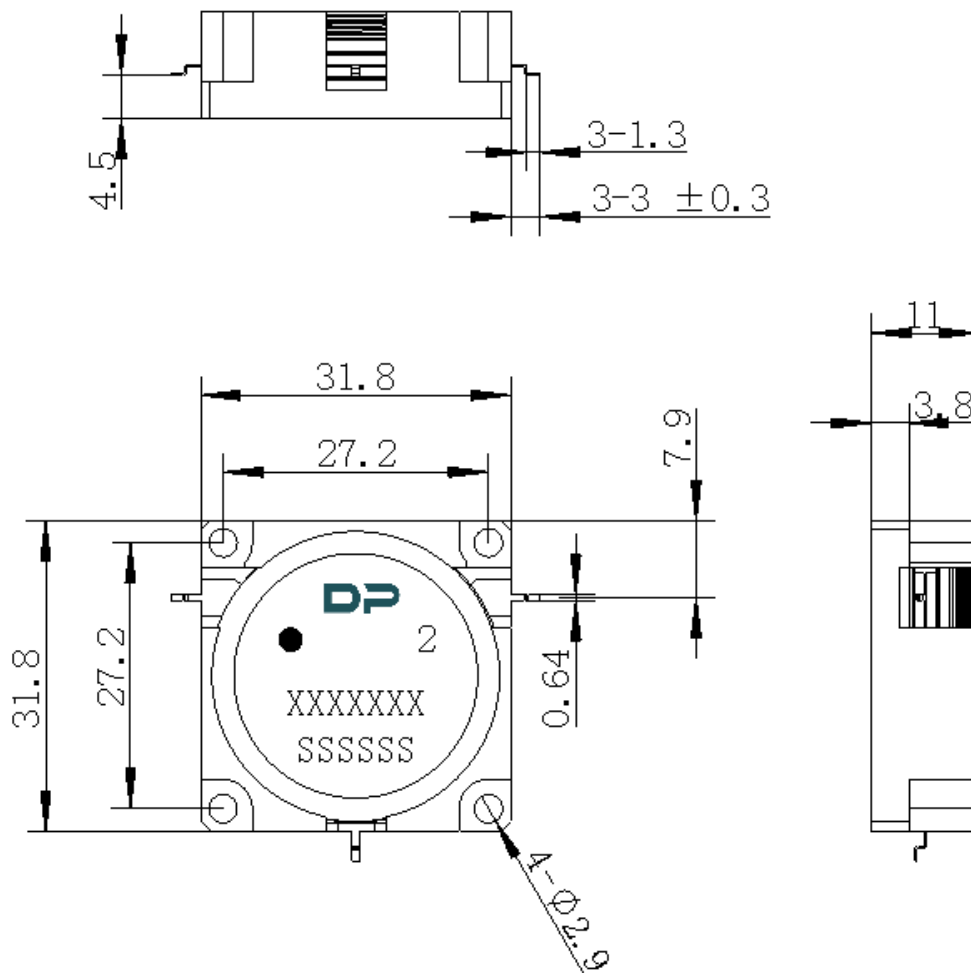
ITEM	SPECIFICATION	
Frequency	617~756	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.30@25±5°C (617~652MHz & 729~756MHz) 0.35@-40~+125°C (617~652MHz & 729~756MHz)	dB
Isolation (Min.)	20@25±5°C (617~652MHz & 729~756MHz) 18@-40~+125°C (617~652MHz & 729~756MHz) 9@567MHz~806 MHz	dB
Return Loss (Min.)	20@25±5°C (617~652MHz & 729~756MHz) 18@-40~+125°C (617~652MHz & 729~756MHz)	dB
3rd IMD (Max.)@ 25±5°C	-68@2x65W CW tones, 1MHz spacing	dBc
3rd IMD (Max.)@-40~+125°C	-60@2x65W CW tones, 1MHz spacing	dBc
Extend frequency	567~806	MHz
Group delay	2.5	ns
Ripple of group delay in extend frequency	2	ns
Resonance point of out-off-band	Resonance point away 557MHz to 816 MHz	MHz
2nd harmonicsuppression	15	dBc
3rd harmonicsuppression	15	dBc
Power FWD/REV/PEAK	280/150/2200	W
Termination/Attenuator	-/-	W/dB
Input Impedance ,real	-	Ω
Input Impedance ,imaginary	-	Ω
Output Impedance ,real	-	Ω
Output Impedance ,imaginary	-	Ω

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.



Mechanical Specifications:



Unit: Millimeters

Notes:

1. The housing is nickel-plated and the circuit is silver-plated.
2. Tolerance ±0.2mm 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