

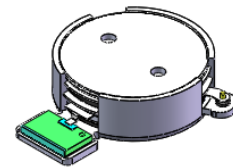


DP0633S

ENG PART: DP-27.28-IM-2110T2180-CW

2110MHz to 2180MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2021/9/6	Nick
B	1.Output Impedance (real) changed from 47Ω to 46Ω ; 2. 3rd harmonic suppression changed from 5 dBc to 10 dBc	ZC.Wu	2021/9/7	Nick

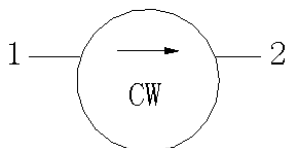


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 2110MHz to 2180MHz
- Operating temperature range: -40°C to $+125^{\circ}\text{C}$
- Storage temperature range: -65°C to $+155^{\circ}\text{C}$
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram

**Electrical Specifications:**

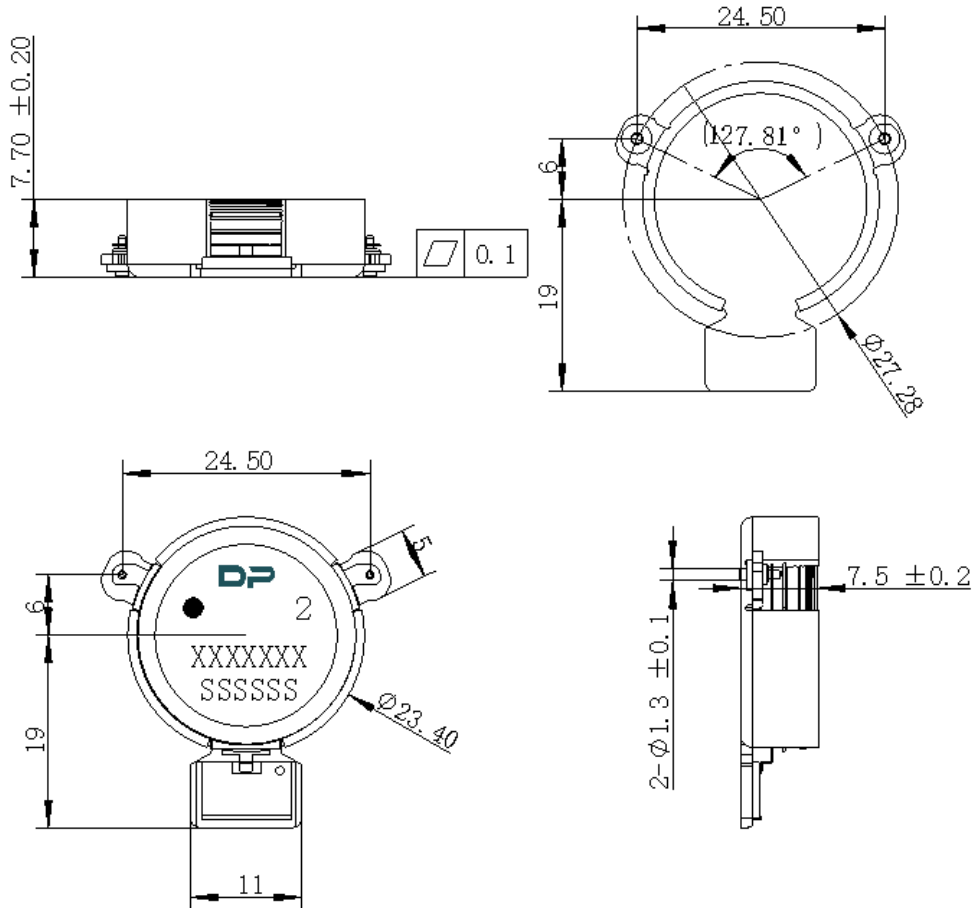
ITEM	SPECIFICATION	
Frequency	2110~2180	MHz
Extend frequency	1960~2330	MHz
Direction	CW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.17@25°C \pm 5°C 0.20@-40~+125°C	dB
Isolation (Min.)	26 13.0@1960MHz~2330MHz	dB
Return Loss (Min)	25	dB
3rd IMD (Max.)	-75@2*100W CW,Spacing 1MHz	dBc
Group delay	2.0	ns
Ripple of group delay in extend frequency	2.0	ns
2nd harmonic suppression	20	dBc
3rd harmonic suppression	10	dBc
Power FWD/REV/PEAK	200/160 (At the maximum operating temperature and the maximum reverse input power, The parts is not damaged for 30 minutes.) /1600	W
Termination/Attenuator	Rated power \geq 250W (rated ambient temperature 100°C, the max. operating temperature \geq 150°C) /-	W/dB
Input Impedance ,real	+46~+52@2110MHz +47~+53@2145MHz & 2180MHz	Ω
Input Impedance ,imaginary	-4~+3@2110MHz -3~+4@2145MHz & 2180MHz	j Ω
Output Impedance ,real	+46~+54	Ω
Output Impedance , imaginary	-4~+4	j Ω
Resonance point of out-off-band	1910MHz~2380 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 up to 130 °C.



Mechanical Specifications:



Unit: Millimeters

Notes:

1. The housing and pins are silver-plated.
2. Tolerance ± 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 XXXXXX
6. Serial Number format shall be SSSSSS
7. The black dot on the label represents the input port