

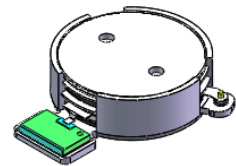


## DP2253S

### ENG PART:DP-27.28IM-1427T1517-CW

1427MHz to 1517MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZZ.Zhu	2022/11/15	Nick

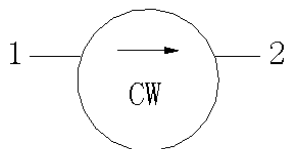


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 1427MHz to 1517MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -65°C to +155°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram

**Electrical Specifications:**

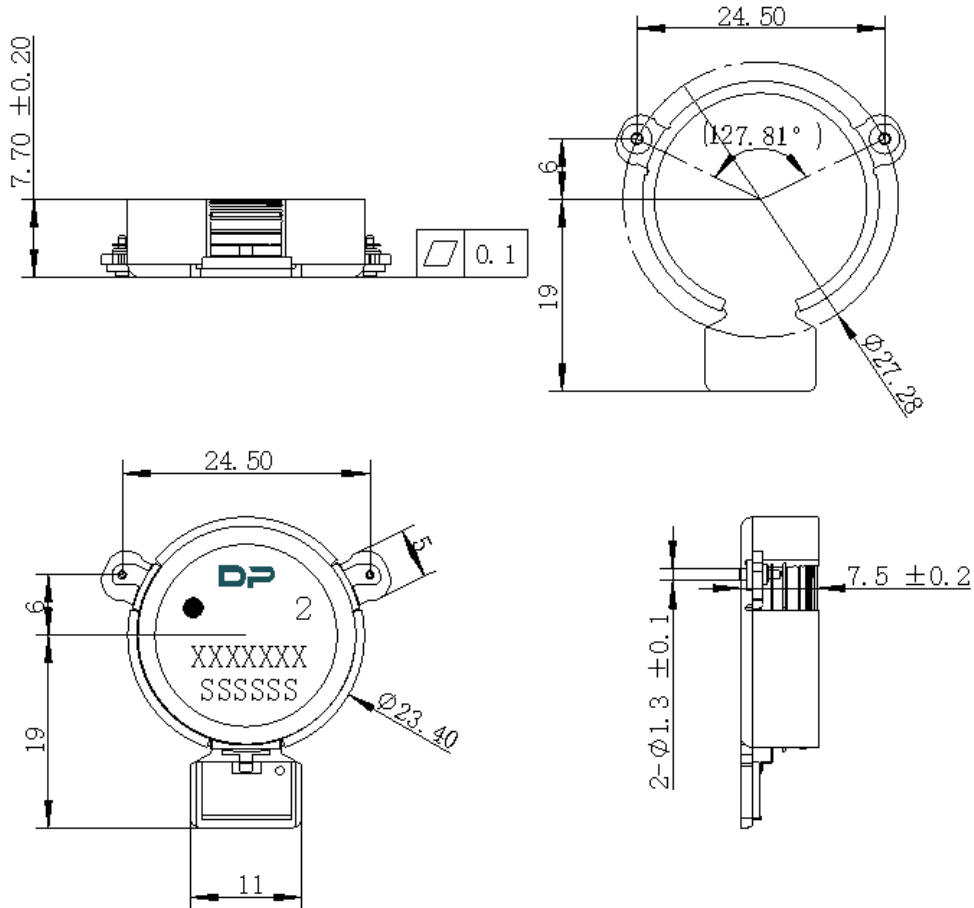
ITEM	SPECIFICATION	
Frequency	1427~1517	MHz
Extend frequency	1322~1622	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.17@25°C $\pm$ 5°C 0.20@-40~+125°C	dB
Isolation (Min.)	26 15@1322MHz~1622MHz	dB
Return Loss (Min)	25	dB
3rd IMD (Max.)	-70@2*100W CW, Spacing 1MHz	dBc
Group delay	2.0	ns
Ripple of group delay in extend frequency	/	ns
2nd harmonic suppression	15	dBc
3rd harmonic suppression	5	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	250/-	W/dB
Input Impedance ,real	+48~+54@1427MHz +46~+52@1472MHz +46~+52@1517MHz	$\Omega$
Input Impedance ,imaginary	-4j~+2j@1427MHz -3j~+3j@1472MHz -2j~+4j@1517MHz	$\Omega$
Output Impedance ,real	45~53	$\Omega$
Output Impedance , imaginary	-5j~+3j@1427MHz -4j~+4j@1472MHz -4j~+4j@1517MHz	j $\Omega$
Resonance point of out-off-band	1227MHz~1717 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: 0.1 mm maximum.
4. Part Number, Lot Code, and Port Designation are printed on the top side of device.
5. Part Number format shall be XXXXXXX
6. Serial Number format shall be SSSSS
7. The black dot on the label represents the input port