

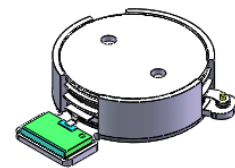


DP2722S

ENG PART: DP-27.28IM-460T470-CCW

460MHz to 470MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZZ.Zhu	2023/9/20	Nick

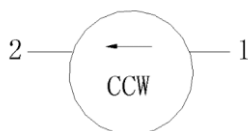


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 460MHz to 470MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -40°C to +115°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram

**Electrical Specifications:**

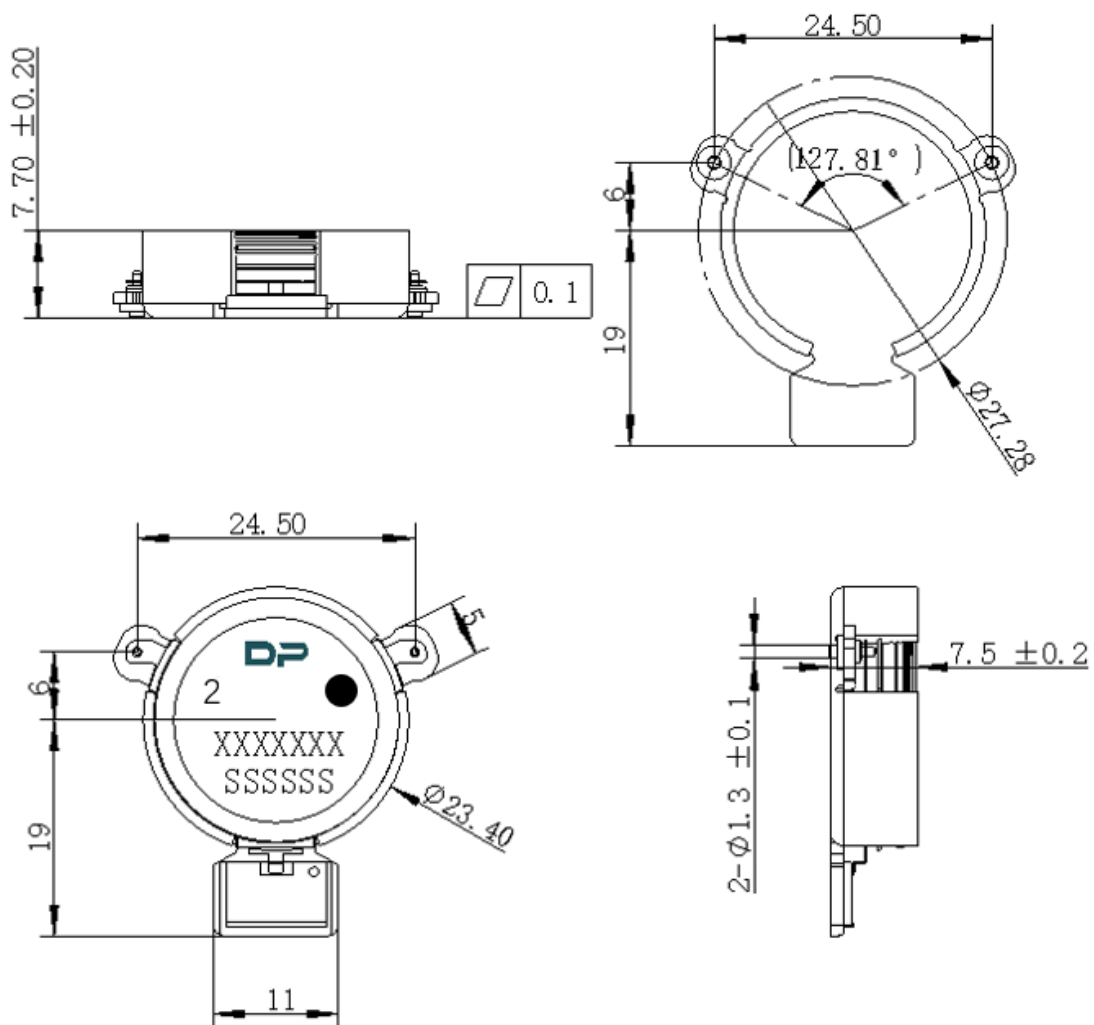
ITEM	SPECIFICATION	
Frequency	460~470	MHz
Extend frequency	450~480	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.28@25°C \pm 5°C	dB
	0.33@-40~+120°C	
Isolation (Min.)	23.0@-40~+120°C	dB
	16@450MHz~480MHz	
Return Loss (Min)	23.0@-40~+120°C	dB
3rd IMD (Max.)	-67@2*30W CW, Spacing 1MHz	dBc
Group delay	4	ns
Ripple of group delay in extend frequency	0.6	ns
2nd harmonic suppression	15	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.) /1000	W
Input Impedance ,real	+48~+55 (typ.51) @460 +45~+52 (typ.48) @465 +43~+50 (typ.46) @470	Ω
Input Impedance ,imaginary	-4j~+6j (typ.-) @460 -5j~+5j (typ.-) @465 -4j~+6j (typ.-) @470	Ω
Output Impedance ,real	+48~+55 (typ.51) @460 +45~+52 (typ.48) @465 +43~+50 (typ.46) @470	Ω
Output Impedance , imaginary	-4j~+6j (typ.-) @460 -5j~+5j (typ.-) @465 -4j~+6j (typ.-) @470	Ω
Resonance point of out-off-band	410MHz~515 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 ± 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 XXXXXXXX
6. Serial Number format shall be SSSSSS
7. The black dot on the label represents the input port