

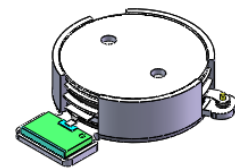


## DP2297S

### ENG PART: DP-27.28IM-859T894-CW

859MHz to 894MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
1	Creating datasheet	Jie.Jiang	2022/11/26	Nick

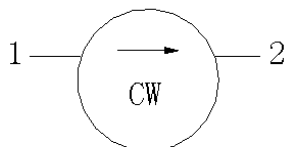


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 859MHz to 894MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -40°C to +130°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



### Electrical Specifications:

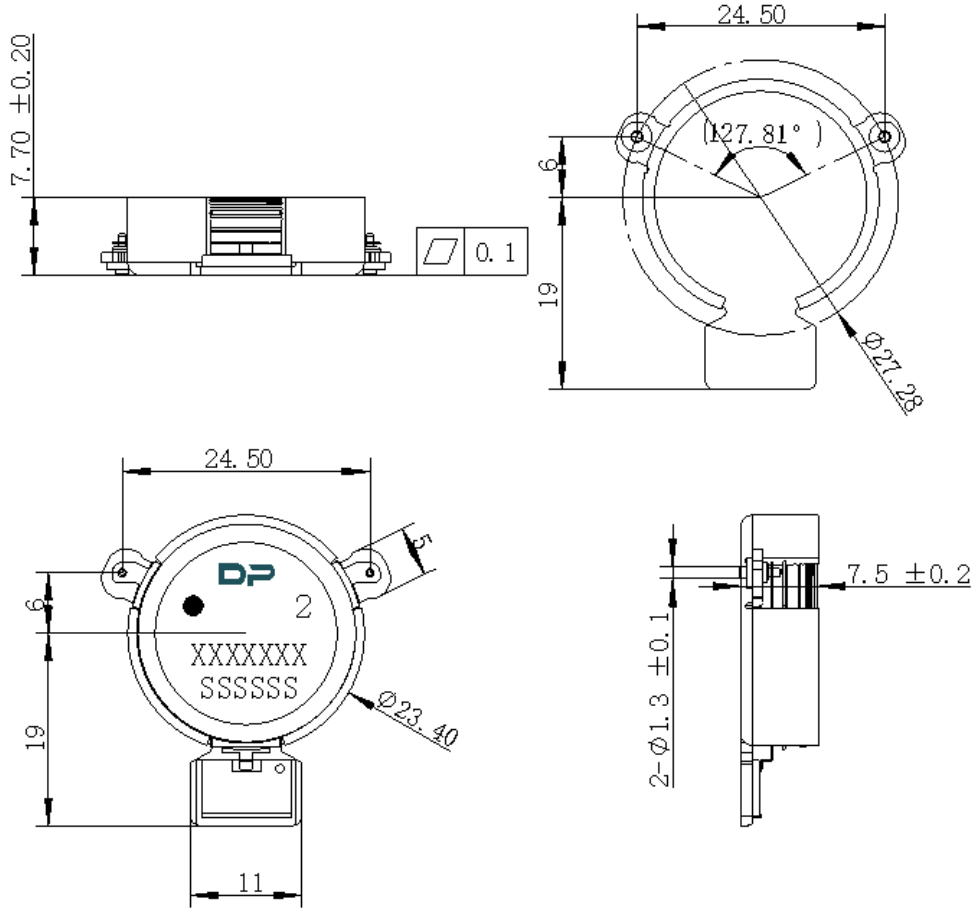
ITEM	SPECIFICATION	
Frequency	859~894	MHz
Extend frequency	779~974	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.20	dB
Isolation (Min.)	25 Typ: 28 10@779MHz~974MHz	dB
Return Loss (Min)	22@-40°C~0°C 24@0°C~120°C	dB
3rd IMD (Max.)	-73@2*65W CW,Spacing 1MHz (Typ.) -70@2*65W CW,Spacing 1MHz (-40~+120°C)	dBc
Group delay	2.5	ns
Ripple of group delay in extend frequency	2.0	ns
2nd harmonic suppression	10	dBc
3rd harmonic suppression	5	dBc
Power FWD/REV/PEAK	200/70 (housing temperature 210 °C,time 10 minutes) /1600	W
Input Impedance ,real	+44~+56	$\Omega$
Input Impedance ,imaginary	-5.5 ~+6.5	j $\Omega$
Output Impedance ,real	-	$\Omega$
Output Impedance , imaginary	-	j $\Omega$
Resonance point of out-off-band	739MHz~1014 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 SSSSSS
7. The black dot on the label represents the input port