

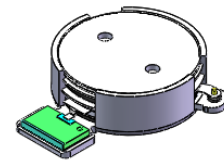


## DP0503S

### ENG PART: DP-27.28IM-785T803-CW

758MHz to 803MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creation	Jie.Jiang	2021/06/04	Nick
B	Remove stack height dimensions $7.5 \pm 0.2$	ZC.Wu	2024/01/26	Nick

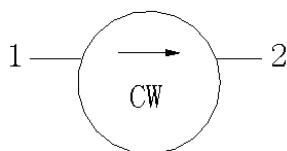


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 758MHz to 803MHz
- Operating temperature range:  $-40^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$
- Storage temperature range:  $-40^{\circ}\text{C}$  to  $+115^{\circ}\text{C}$
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram

**Electrical Specifications:**

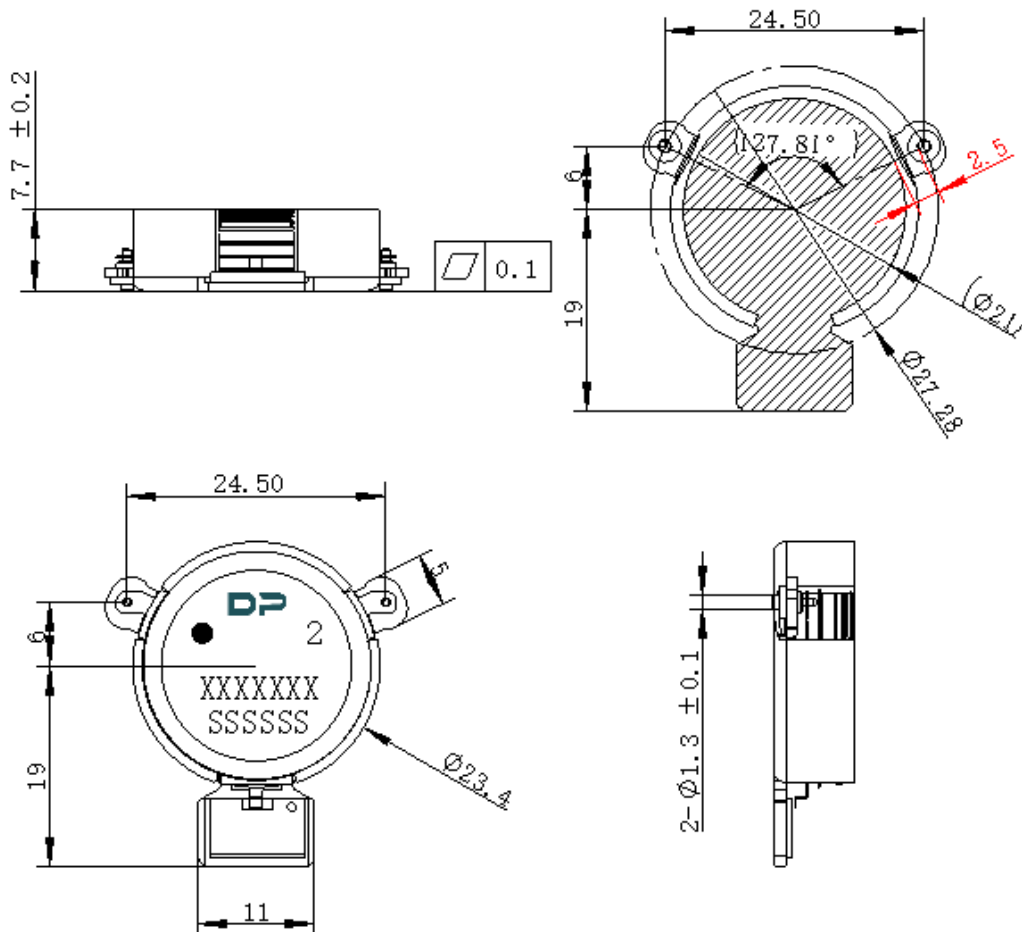
ITEM	SPECIFICATION	
Frequency	758~803	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.30@-40~+90℃ 0.35@+90~+120℃	dB
Isolation (Min.)	22@-40~0℃ 23@0~+120℃ Typ.25	dB
Return Loss Input(Min)	22@-40~0℃ 23@0~+120℃	dB
Return Loss Out(Min)	22	dB
3rd IMD (Max.)	-68@2*65W CW,Spacing 1MHz -65@2*65W CW,Spacing 1MHz (+90~+120℃ )	dBc
Extend frequency	670~890	MHz
Group delay	2.5	ns
Ripple of group delay in extend frequency	2.5	ns
Isolationof extend frequency	8	dB
2nd harmonicsuppression	10	dBc
3rd harmonicsuppression	10	dBc
Power FWD/REV/PEAK	150/60 (housing temperature 210 ℃,time 10 minutes) /1000	W
Input Impedance ,real	+43~+57.5@-40~0℃ +44~+56.5@0~+120℃	$\Omega$
Input Impedance ,imaginary	-6j~+6.5j@-40~0℃ -5j~+6.5j@0~+120℃	$\Omega$
Resonance point of out-off-band	701MHz~891 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 ℃.



### 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