

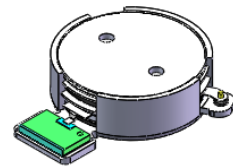


DP3820S

ENG PART: DP-27.28IM-758T960-CCW

758MHz to 960MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZZ.Zhu	2025/3/19	Nick

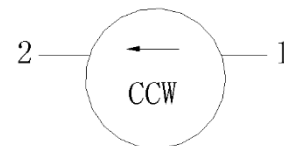


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 758MHz to 960MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -65°C to +155°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

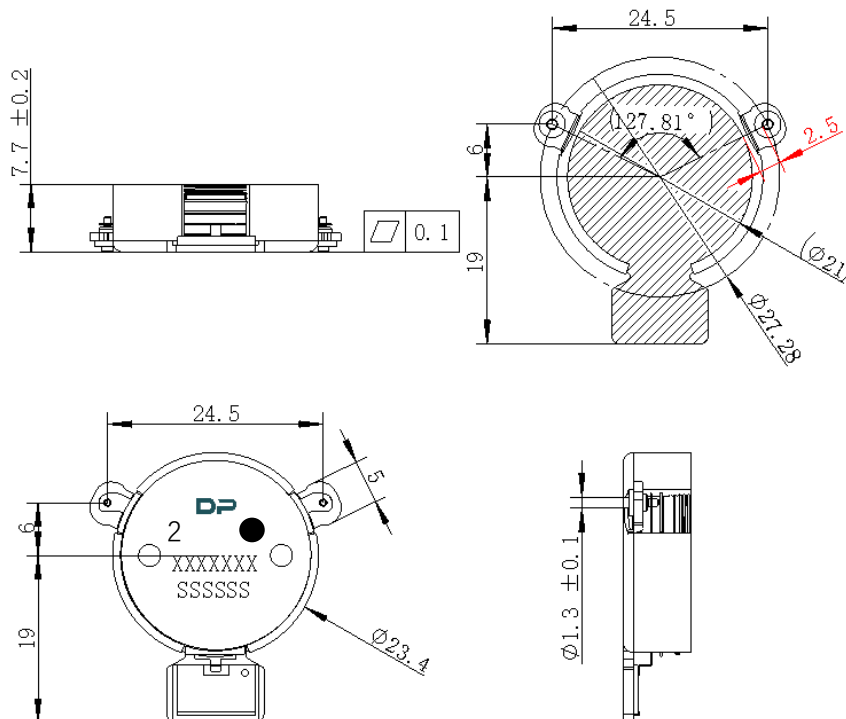
ITEM	SPECIFICATION	
Frequency	758~960	MHz
Extend frequency	-	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.40@-40~+105°C 0.45@+105~+125°C	dB
Isolation (Min.)	18@-40~+105°C 16.5@+105~+125°C	dB
Return Loss (Min)	18@-40~+105°C 16.5@+105~+125°C	dB
3rd IMD (Max.)	-50@2*50W CW Tones, Spacing 1MHz	dBc
Group delay(Min.)	3.0	ns
Ripple of group delay in extend frequency	/	ns
2nd harmonic suppression	20	dBc
3rd harmonic suppression	15	dBc
Power FWD/REV/PEAK	150/130/1200	W
Termination/Attenuator	150/-	W/dB
Input Impedance ,real	+37~+63	Ω
Input Impedance ,imaginary	-13~+13	j Ω
Output Impedance ,real	+37~+63	Ω
Output Impedance , imaginary	-13~+13	j Ω
Resonance point of out-off-band	658MHz~1020MHz	

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 XXXXXXX
6. Serial Number format shall be SSSSSS
7. The black dot on the label represents the input port