

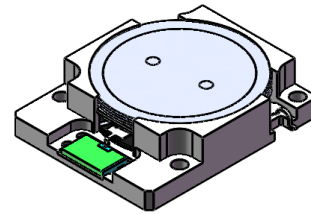


DP2052S

ENG PART: DP-38.8X38.8ID-1805T2170-CCW

1805MHz to 2170MHz Single-Junction Drop-in Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2022/5/6	Nick

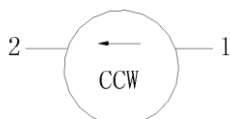


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 1805MHz to 2170MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -40°C to +150°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



Electrical Specifications:

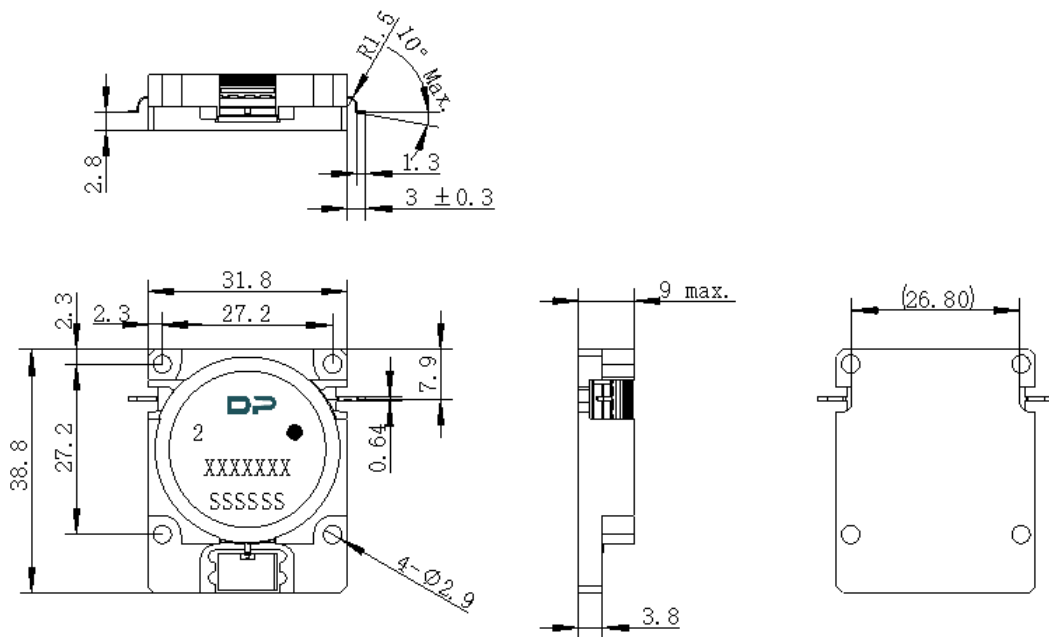
ITEM	SPECIFICATION	
Frequency	1805~2170	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.2@-40~+90 $^{\circ}$ C 0.28@+90~+120 $^{\circ}$ C	dB
Isolation (Min.)	22 12@1655~2320MHz	dB
Return Loss (Min.)	20@-40~+90 $^{\circ}$ C 19@+90~+120 $^{\circ}$ C	dB
3rd IMD (Max.)@ -40~+90 $^{\circ}$ C	-75@2x100W CW tones, 1MHz spacing (1800M band) -68@2x100W CW tones 1MHz spacing (2100M band)	dBc
3rd IMD (Max.)@+90~+120 $^{\circ}$ C	-72@2x100W CW tones, 1MHz spacing (1800M band) -65@2x100W CW tones, 1MHz spacing (2100M band)	dBc
Extend frequency	1655~2320	MHz
Group delay	2	ns
Ripple of group delay in extend frequency	2	ns
Resonance point of out-off-band	Resonance point away 1605 MHz to 2370 MHz	MHz
2nd harmonic suppression	10	dBc
3rd harmonic suppression	5	dBc
Power FWD/REV/PEAK	280/150 (housing temperature 210 $^{\circ}$ C, duration 10 minutes) /2200	W
Termination/Attenuator	250/-	W/dB
Input Impedance ,real	43 Min 50 Typ 57 Max	Ω
Input Impedance ,imaginary	-6j Min +7j Max	Ω
Output Impedance ,real	43 Min 50 Typ 57 Max	Ω
Output Impedance ,imaginary	-6j Min +8j Max	Ω

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% with operating temperature up to 130 $^{\circ}$ 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 SSSSS
7. The black dot on the label represents the input port