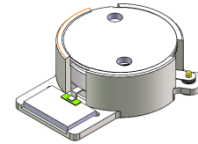




## DP0223S

### 1452MHz to 1496MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2020/04/27	Nick
B	Updated insertion loss and impedance	ZC.Wu	2020/05/06	Nick
C	1.Replace the number 1 on the input port of the label with a black dot; 2. Added tolerance to the drawing; 3.Added packaging drawing.	ZC.Wu	2020/10/10	Nick
D	Changed the Insertion Loss from 0.22 to 0.2	Jie.Jiang	2020/11/20	Nick
E	Update the Impedance ( imaginary)	ZC.Wu	2021/1/12	Nick

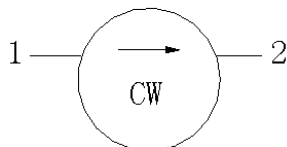


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 1452MHz to 1496MHz
- 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:

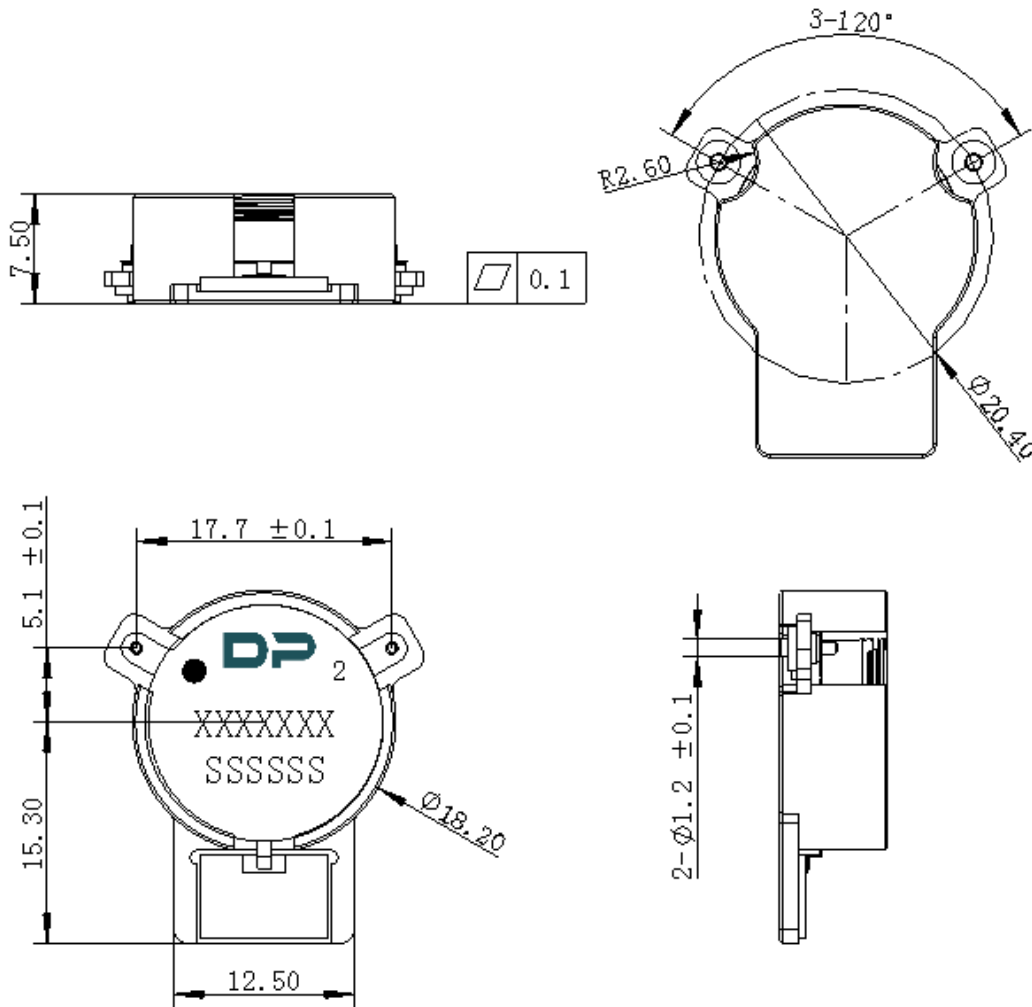
ITEM	SPECIFICATION	
Frequency	1452~1496	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.2	dB
Isolation (Min.)	26 12@1342~1606MHz	dB
Return Loss (Min.)	25	dB
3rd IMD (Max.)	-70	dBc
Extend frequency	1342~1606	MHz
Group delay	2	ns
Ripple of group delay in extend frequency	2	ns
Resonance point of out-off-band	Resonance point away 1292 MHz to 1646 MHz	MHz
2nd harmonic suppression	10	dBc
3rd harmonic suppression	5	dBc
Power FWD/REV/PEAK	150/60 (Flange temperature 210 °C, duration 10 minutes) /1000	W
Termination/Attenuator	150/-	W/dB
Phase difference of all products @S21	-	°
Phase difference of the same carrier package product@ S21	-	°
Input Impedance ,real	45.5 Min 54.5 Max	$\Omega$
Input Impedance ,imaginary	-5j Min +5j Max	$\Omega$

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 the operating temperature 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. The XXXXXXX on the label represents the part number
6. The SSSSSS on the label represents the serial number
7. The black dot on the label represents the input port



Packaging Style:

ITEM	W	A0	B0	K0	D	E	F	F2	P	P0	P2	Γ
DM	44	Φ18.5	29.5	7.8	Φ1.5	1.75	15.0	40.5	36	4	2	0.5
TOL	±0.3	±0.2	±0.2	+0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

