

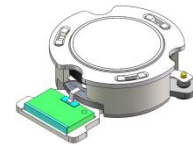


DP3642S

ENG PART:DP-18.2IM-1427T1517-CCW

1427MHz to 1517MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZZ.Zhu	2024/12/17	Nick

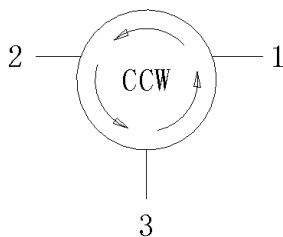


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 1427MHz to 1517MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -50°C to +130°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

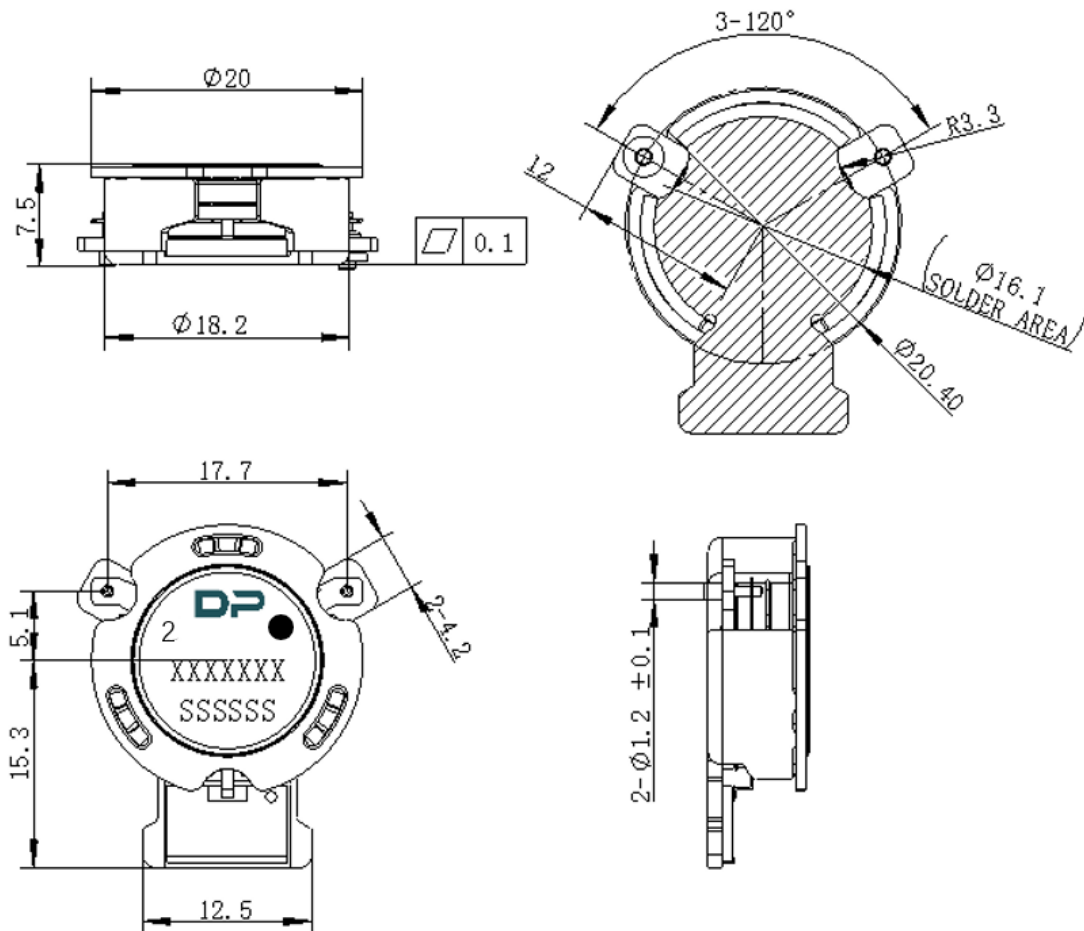
ITEM	SPECIFICATION	
Frequency	1427~1517	MHz
Extend frequency	1400~1559	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.21 @ 25 \pm 5 $^{\circ}$ C 0.25 @ -40~+125 $^{\circ}$ C	dB
Isolation (Min.)	26	dB
Return Loss (Min.)	25	dB
3rd IMD (Max.)	-70 @ 2X50w CW tones, spacing 1MHz	dBc
Group delay	2	ns
Ripple of group delay in extend frequency	0.2	ns
Resonance point of out-off-band	1277MHz to 1667 MHz	MHz
2nd harmonic suppression	20	dBc
3rd harmonic suppression	15	dBc
Power FWD/REV/PEAK	150/-/1000	W
Termination/Attenuator	150/-	W/dB
Input Impedance ,real	50 \pm 4	Ω
Input Impedance ,imaginary	\pm 4	j Ω
Output Impedance ,real	50 \pm 4	Ω
Output Impedance ,imaginary	\pm 4	j 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% (Insertion loss > 20%) with the 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. 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	T
DM	56	Φ18.5	25	8.0	Φ1.5	1.75	26.25	52.5	44	4	2	0.5
TOLE	±0.3	±0.2	±0.2	+0.2	+0.1	±0.1	±0.15	±0.1	±0.1	±0.1	±0.1	±0.05

