

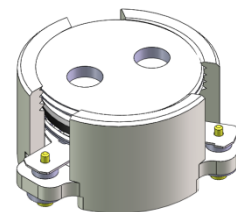


DP0170C

ENG PART:DP-20.4CM-869T896-CCW

869MHz to 896MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Producing datasheet	ZC.Wu	2023/9/8	Nick
B	The operating temperature range is changed from -40°C to +85°C to -40°C to +105°C.	ZZ.Zhu	2025/3/5	Nick

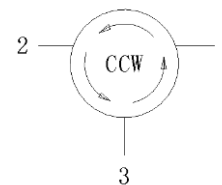


Applications:

- Wireless Infrastructure
- Power Amplifier

Features:

- Operating frequency range: 869MHz to 896MHz
- Operating temperature range: -40°C to +105°C
- Storage temperature range: -50°C to +140°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram



Electrical Specifications:

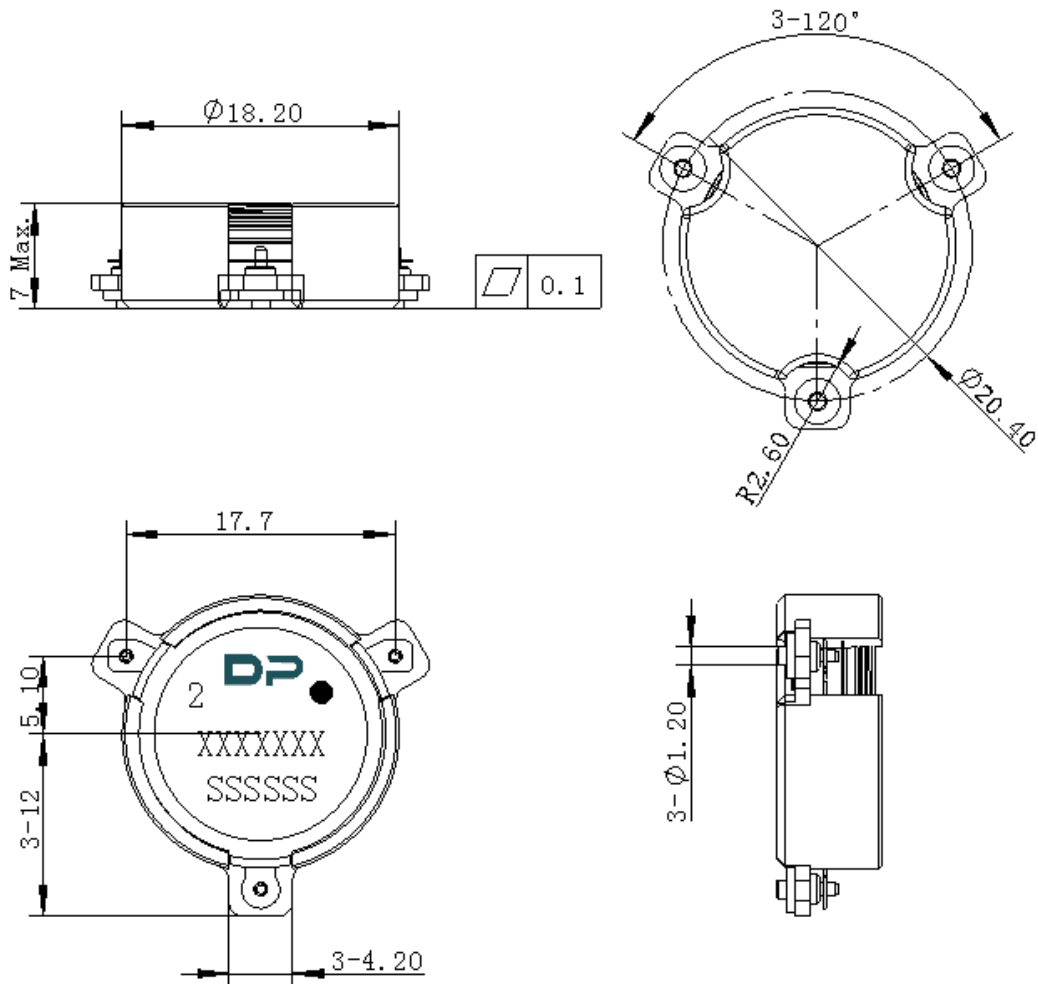
ITEM	SPECIFICATION	
Frequency	869~896	MHz
Direction	CCW	
Impedance	Typ: 50	Ω
Insertion Loss (Max.)	0.25	dB
Isolation (Min.)	21.0	dB
Return Loss (Min.)	21.0	dB
3rd IMD (Max.)	/	dBc
2nd harmonic	/	dBc
3rd harmonic	/	dBc
Power FWD/REV/PEAK	150/-/1000	W
Termination/Attenuator	/	W/dB

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: 0.1mm 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



Packaging Style:

ITEM	W	A0	B0	K0	D	E	F	F2	P	P0	P2	T
DM	44	Φ18.5	23.5	7.2	Φ1.5	1.75	20.2	40.5	32	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

