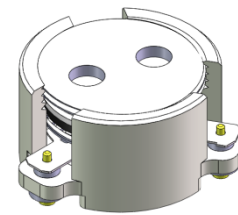




## DP0509C

### 758MHz to 788MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2021/6/8	Nick

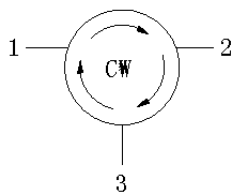


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 758MHz to 788MHz
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -50°C to +105°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



### Electrical Specifications:

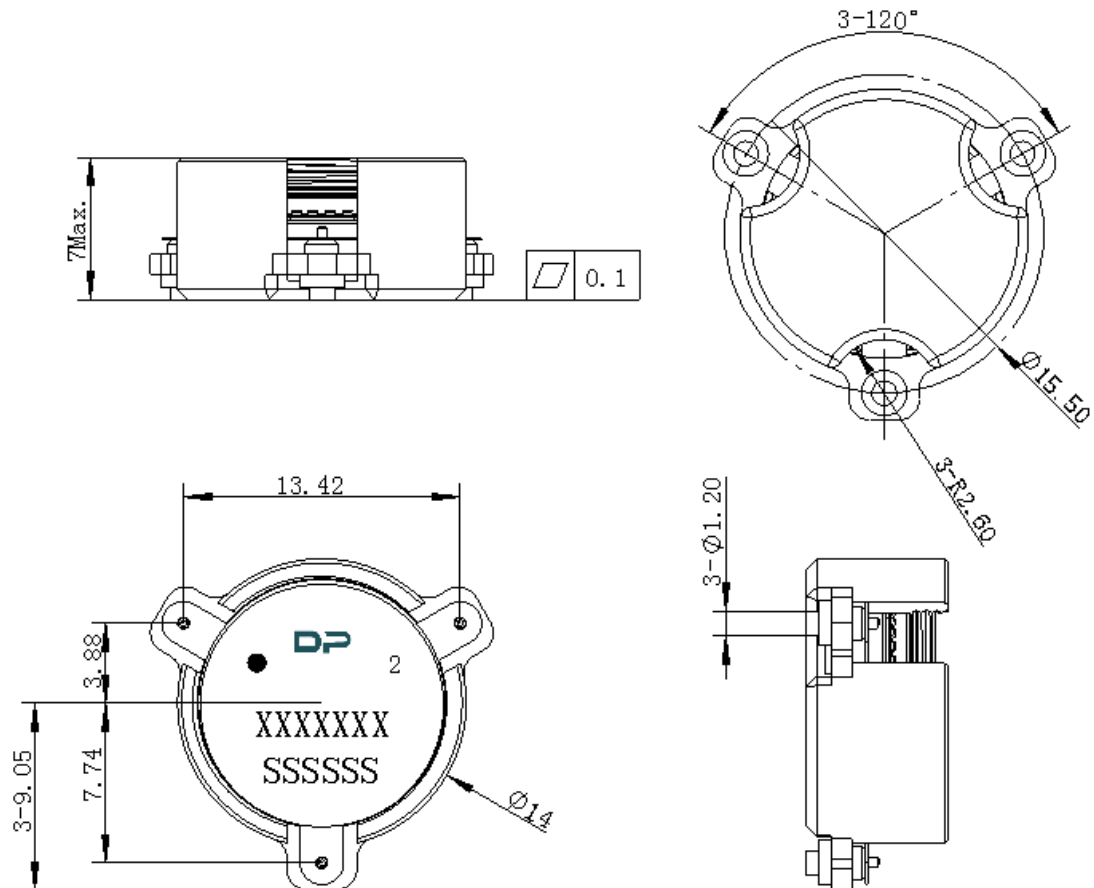
ITEM	SPECIFICATION	
Frequency	758~788	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.5	dB
Isolation (Min.)	25@25 $\pm$ 5 $^{\circ}$ C 21@-40~+85 $^{\circ}$ C	dB
Return Loss (Min.)	25@25 $\pm$ 5 $^{\circ}$ C 21@-40~+85 $^{\circ}$ C	dB
3rd IMD (Max.)	-60@2x5W CW tones, 1MHz spacing	dBc
Extend frequency	/	MHz
Ripple of group delay in extend frequency	/	ns
Isolation of extend frequency	/	dB
2nd harmonic	/	dBc
3rd harmonic	/	dBc
Power FWD/REV/PEAK	35/-/100	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.



### 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: 0.1mm 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
DIM	32	$\Phi 14.3$	18.5	7.2	$\Phi 1.5$	1.75	14.2	28.5	24	4	2	0.5
TOL	$\pm 0.3$	$\pm 0.2$	$\pm 0.2$	+0.2	+0.1	$\pm 0.1$	$\pm 0.15$	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$	$\pm 0.1$	$\pm 0.05$

