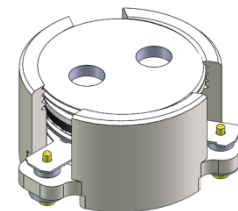




## DP0239C

### 2496MHz to 2690MHz Single-Junction Surface Mount Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	ZC.Wu	2020/05/08	Nick
B	Replace the number 1 on the input port of the label with a black dot	ZC.Wu	2020/10/10	Nick

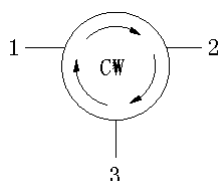


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 2496MHz to 2690MHz
- Operating temperature range: -40°C to +120°C
- Storage temperature range: -55°C to +150°C
- Small surface-mount package delivered on T&R
- BeO free & RoHS compliant



Block Diagram



### Electrical Specifications:

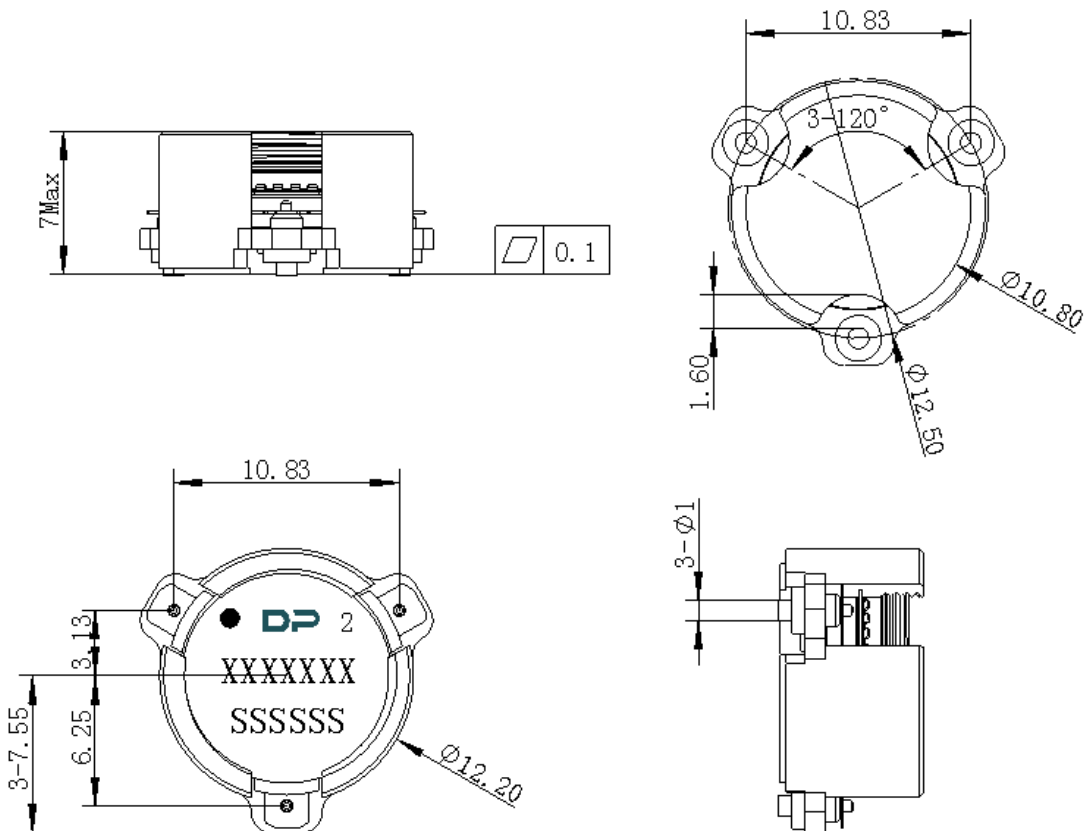
ITEM	SPECIFICATION	
Frequency	2496~2690	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.35 Typ:0.2	dB
Isolation (Min.)	18 Typ:23	dB
Return Loss (Min.)	20.8	dB
FWD 3rd IMD (Max.)	-60@2x10W,CW tones,spacing 1MHz Typ:-65@2x10W,CW tones,spacing 1MHz	dBc
Extend frequency	2346~2840	MHz
Isolation of extend frequency	14	dB
Group delay	2	ns
2nd harmonic suppression	5	dBc
3rd harmonic suppression	5	dBc
Power FWD/REV/PEAK	200/-/1600	W
Ripple of group delay in extend frequency	2	ns
Input Impedance ,real	44 Min 50 Typ. 56 Max	$\Omega$
Input Impedance ,imaginary	-14j Min 0j Typ +10j Max	$\Omega$
Out-off-band resonance point	Resonance point away 1996 MHz to 3190 MHz	

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  $\pm 0.2$ 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. Part Number format shall be XXXXXXXX.
6. Serial Number format shall be SSSSSS



Packaging Style:

ITEM	W	A0	B0	K0	D	E	F	F2	P	P0	P2	T
DIM	32	14.7	12.4	7.4	Φ1.5	1.75	14.2	28.5	24	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

