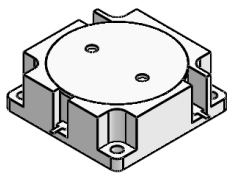




## DP1069C

### 380MHz to 512MHz Single-Junction Drop-in Circulator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	Creating datasheet	TZ.Wang	2021/03/25	DP.Zhang
B	Update the spec.	ZC.Wu	2023/1/15	KL.Wang

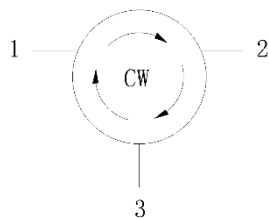


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range:380MHz to 512MHz
- Operating temperature range: -40°C to +85°C
- Storage temperature range: -50°C to +110°C
- BeOfree&RoHS compliant



Block Diagram



## Electrical Specifications:

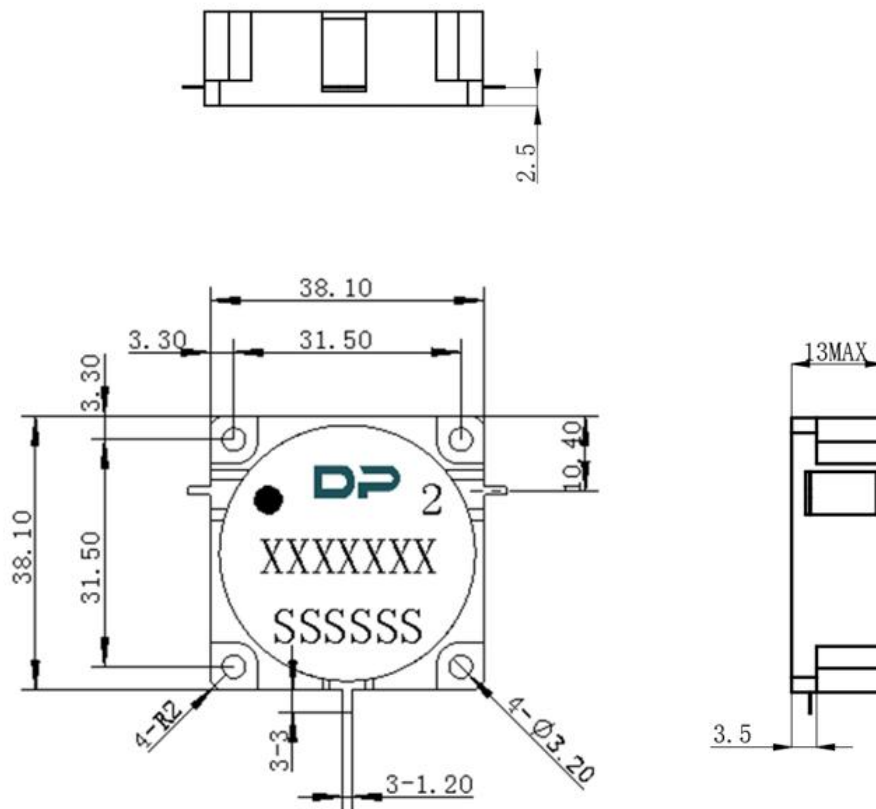
ITEM	SPECIFICATION	
Frequency	380~512	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.)	0.55@25 $\pm$ 5 $^{\circ}$ C 0.70@-40~+85 $^{\circ}$ C	dB
Isolation (Min.)	18@25 $\pm$ 5 $^{\circ}$ C 17@-40~+85 $^{\circ}$ C	dB
Return Loss (Min.)	18@25 $\pm$ 5 $^{\circ}$ C 17@-40~+85 $^{\circ}$ C	dB
3rd IMD (Max.)	-55@2x40W CW tones, 5MHz spacing	dBc
2nd harmonic	20	dB
Power FWD/PEAK	200/500	W

### 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  $^{\circ}$ C.



### Mechanical Specifications:



Unit: Millimeters

#### Notes:

1. Tolerance  $\pm 0.2$  mm unless otherwise specified.
2. Co-planarity Specification: 0.1 mm maximum.
3. Part Number, Lot Code, and Port Designation are printed on the top side of device.
4. Drawing Number format shall be XXXXXXXX
5. Serial Number format shall be SSSSSS
6. The black dot on the label represents the input port.