

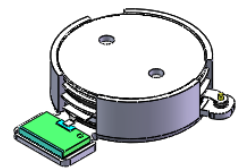


## DP2827S

### ENG PART: DP-27.28IM-773T875-CW

773MHz to 875MHz Single-Junction Surface Mount Isolator

REV.	DESCRIPTION	REVISOR	DATE	APPROVED
A	SAME AS REV.2	ZZ.Zhu	2023/10/18	Nick

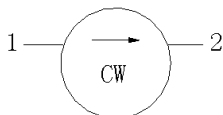


#### Applications:

- Wireless Infrastructure
- Power Amplifier

#### Features:

- Operating frequency range: 773MHz to 875MHz
- Operating temperature range: -40°C to +125°C
- Storage temperature range: -40°C to +125°C
- Small surface-mount package delivered on T&R
- BeOfree&RoHS compliant



Block Diagram

**Electrical Specifications:**

ITEM	SPECIFICATION	
Frequency	773~875	MHz
Direction	CW	
Impedance	Typ: 50	$\Omega$
Insertion Loss (Max.) @-40~+115 $^{\circ}$ C	0.30@773~875MHz 0.28@ 773~783MHz &860~875MHz	dB
Insertion Loss (Max.) @+115~+125 $^{\circ}$ C	0.30@ 773~783MHz &860~875MHz	dB
Isolation (Min.)	20@773~875MHz 23@773~783MHz (+25~+125 $^{\circ}$ C) 21@773~783MHz (-40~25 $^{\circ}$ C) 18@753~773MHz 23@860~875MHz (+25~+125 $^{\circ}$ C) 21@860~875MHz (-40~25 $^{\circ}$ C) 20@875~895MHz	dB
Return Loss (Min.)@-40~0 $^{\circ}$ C	17@773~875MHz 20@773~783MHz 18@753~773MHz 6@703~753MHz 20@860~875MHz 20@875~895MHz 6@895~945MHz	dB
Return Loss (Min.)@0~+125 $^{\circ}$ C	20@773~875MHz 23@773~783MHz 18@753~773MHz 6@703~753MHz 23@860~875MHz 20@875~895MHz 6@895~945MHz	dB
3rd IMD (Max.)	-65 @2x50W CW tones 773~783MHz &860~875MHz	dBc
5th IMD (Max.)	-79 @2x50W CW tones 773~783MHz &860~875MHz	dBc
Harmonics	0@2x f 100W CW -10@3x f 100W CW -10@4x f 100W CW -35@5x f 100W CW -25@6x f 100W CW -25@7x f 100W CW	dBm
Out of band attenuation	10@2x f 5@3x f 5@nx f (n=order of in- band frequency multiple)	dB
Group delay	2.8	ns



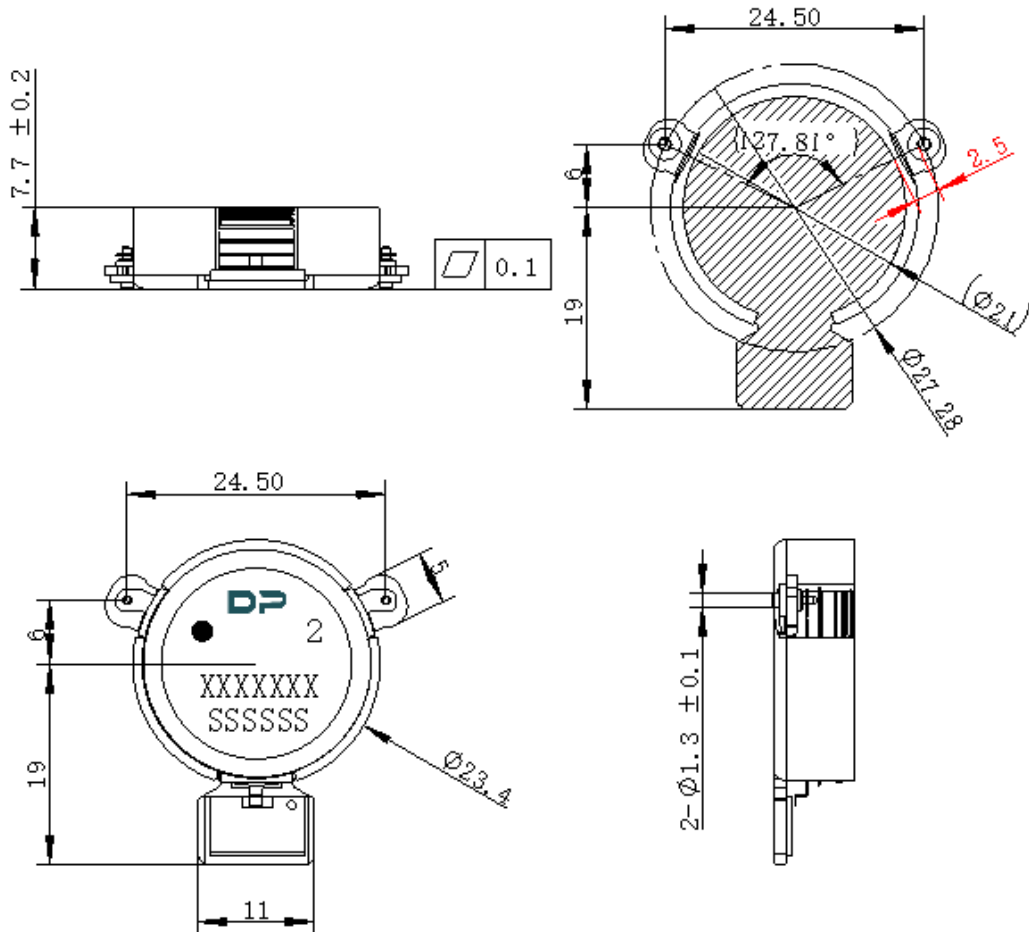
Deviation from nominal delay	$\pm 0.05$	ns
Power FWD/REV/PEAK	150/80/1500	W
Max voltage rating	1080	V
Impedance control (the reference point at Isolator Pad)	Re: 50+/- 6 Im: +/- 7j	$\Omega$
Termination/Attenuator	150/-	W/dB
No resonance during	671~945MHz	

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: 0.1 mm 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
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	56	Φ23.8	31.1	8.3	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

