

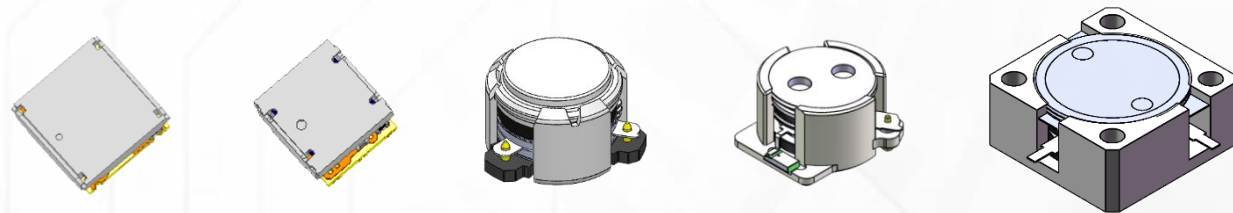
Circulator & Isolator

Application

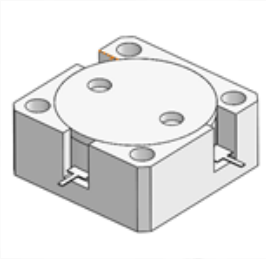
- Base station
- RRH/RRU/AAU
- Small Cell, DAS
- Microwave communication
- Satellite Communication
- Radar
- Broadcasting

Key features

- Frequency: 200MHz ~ 9GHz
- Insertion loss: 0.15dB (minimum) 0.2~0.35dB (typical)
- Input and output return loss: 20dB (minimum) 25~28dB (typical)
- Isolation: 20dB (minimum) 25~30dB (typical)
- Third-order intermodulation IMD: 60dB (minimum) 65~80dB (typical)
- Input and output impedance real part: 50 ± 5 ohm (tolerance can be adjusted according to customer requirements)

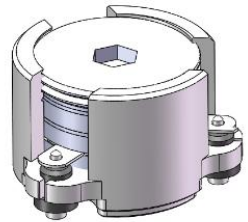


Circulator & Isolator



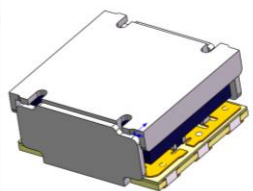
Drop In (high power) Circulator & Isolator

19mm*19mm、 25.4mm*25.4mm、 31.8mm*31.8mm、
31.8mm*38.8mm ...



SMD (high power) Circulator & Isolator

Ø7mm、 Ø10mm、 Ø12.5mm、 Ø15mm、 Ø25mm、
9mm*9mm ...



SMD (low power) Circulator & Isolator

7mm*7mm、 5mm*5mm、 4mm*4mm ...

7

Product Series

45

Package Size

500+

PNs

Providing a full range of circulator & isolator products (including ferrite, waveguide, microstrip, low power, etc.)

Meeting customers diversified applications & Following customers product evolution

Circulator & Isolator

◆ High Power Surface Mount (SMD) Circulator & Isolator

Product Series	Working frequency (MHz)	Dimension (mm)	Power (W)	return loss (dB)	insertion loss (dB)	Isolation (dB)	third-order intermodulation (dBc)
DPxxxxC	200 ~ 9000	Ø7 ~ 38.1*38.1	20 ~ 500	20 Min.	0.15 ~ 0.35	20 Min.	60 Min.
DPxxxxS	200 ~ 9000	Ø7 ~ 38.1*38.1	20 ~ 500	20 Min.	0.15 ~ 0.35	20 Min.	60 Min.

◆ Drop In Circulator & Isolator

Product Series	Working frequenc (MHz)	Dimension (mm)	Power (W)	return loss (dB)	insertion loss (dB)	Isolation (dB)	third-order intermodulation (dBc)
DPxxxxC	200 ~ 9000	Ø7 ~ 38.1*38.1	20 ~ 500	20 Min.	0.15 ~ 0.35	20 Min.	60 Min.
DPxxxxS	200 ~ 9000	Ø7 ~ 38.1*38.1	20 ~ 500	20 Min.	0.15 ~ 0.35	20 Min.	60 Min.

◆ Low Power Surface Mount (SM) Circulator & Isolator

Product Series	Working frequency (MHz)	Dimension (mm)	Power (W)	return loss (dB)	insertion loss (dB)	Isolation (dB)	third-order intermodulation (dBc)
DP-CLxxxxxxxx	400 ~ 5000	7*7/5*5/4*4	10	12 Min.	0.6 ~ 0.8	12 Min.	50 Min.

Circulator & Isolator

φ7mm SMD series for 2.6G & 3.5G

Key parameters	Specification requirements (Ø7mm)	Dapu (Ø7mm)
Frequency (MHz)	2496 ~ 2690	2496 ~ 2690
Isolation (dB)	20	20
Return Loss (dB)	22	22
Insertion Loss (dB)	0.35	0.26
Impedance (Ω)	50	50
3 rd IMD (Max.) (dBc)	-60 (2 x 5W)	-60 (2 x 5W)
2 nd Attenuation (dB)	20	22
Power FWD/REV/PEAK (W)	30/30/150	50/50/200
Operating Temp. (°C)	-40 to +110	-40 to +125

Key parameters	Specification requirements (Ø7mm)	Dapu (Ø7mm)
Frequency (MHz)	3400 ~ 3600	3400 ~ 3600
Isolation (dB)	20	20
Return Loss (dB)	22	22
Insertion Loss (dB)	0.3	0.23
Impedance (Ω)	50	50
3 rd IMD (Max.) (dBc)	-60 (2 x 5W)	-60 (2 x 5W)
2 nd Attenuation (dB)	20	25
Power FWD/REV/PEAK (W)	30/30/150	50/50/200
Operating Temp. (°C)	-40 to +110	-40 to +125



Ø7mm

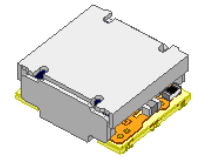
* Full temperature performance

Circulator & Isolator

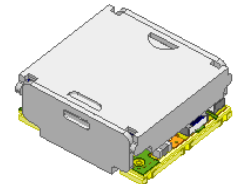
Low power models

Part Number	Frequency	Center frequency	Insertion loss	Isolation	Return loss	Handling power	Reflection power	Size[W*L*T]	
	(MHz)	(MHz)	(dB)	(dB)	(dB)	(W)	(W)	W*L[mm]	T[mm]
	-	-	Max.	Min	Max.	Max	Max	±0.3	±0.2
DP-IL0520(A&B)634	617-652	634.5	1.30	9	11	5	2	5*5	2
DP-IL0520(A&B)748	729-768	748.5	1.30	9	11	5	2	5*5	2
DP-IL0520(A&B)780	758-803	780.5	1.20	11	11	5	2	5*5	2
DP-IL0520(A&B)806	791-821	806	1.10	11	11	5	2	5*5	2
DP-IL0520(A&B)873	852-894	873	1.10	10	11	5	2	5*5	2
DP-IL0520(A&B)942	925-960	942.5	0.90	13	13	5	2	5*5	2
DP-IL0520(A&B)1842	1805-1880	1842.5	0.80	14	14	5	2	5*5	2
DP-IL0520(A&B)1900	1880-1920	1900	0.65	14	14	5	2	5*5	2
DP-IL0520(A&B)1960	1930-1990	1960	0.65	14	14	5	2	5*5	2
DP-IL0520(A&B)1962	1930-1995	1962.5	0.70	14	14	5	2	5*5	2
DP-IL0520(A&B)2140	2110-2170	2140	0.65	14	14	5	2	5*5	2
DP-IL0520(A&B)2155	2110-2200	2155	0.70	14	14	5	2	5*5	2
DP-IL0520(A&B)2350	2300-2400	2350	0.70	14	14	5	2	5*5	2
DP-IL0520(A&B)2593	2496-2690	2593	0.80	12	12	5	2	5*5	2
DP-IL0520(A&B)2655	2620-2690	2655	0.65	15	14	5	2	5*5	2
DP-IL0520(A&B)3450	3300~3600	3450	0.90	10	12	5	2	5*5	2
DP-IL0520(A&B)3500	3400~3600	3500	0.90	13	12	5	2	5*5	2
DP-IL0520(A&B)3625	3550~3700	3625	0.90	13	12	5	2	5*5	2
DP-IL0520(A&B)3700	3600~3800	3700	0.90	13	12	5	2	5*5	2

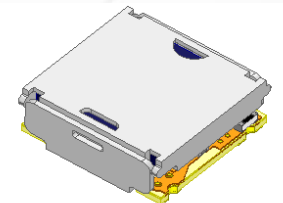
4*4mm



5*5mm



7*7mm



Operating temperature range : -40~85°C