

Product Specification

CMIPS-0912B6M 6 Bit Dispersive Phase Shifter Module

Technical specifications

Parameters	Specifications [6 pcs in one package]
Freq Range	0.9~1.2GHz
Insertion Loss	≤ 2.0 dB
VSWR	≤1.5: 1
Control Bit	6 bit [basic phase shift degrees: 5.625°, 11.25°, 22.5°, 45°, 90°, 180°] @1.05GHz [Center Frequency]
Phase Shift Flatness	≤±4°@1.05GHz [Center Frequency]
Amplitude variation	≤±0.3dB [caused by phase change]
Amplitude unbalance	≤±0.3dB [amplitude diff. between different phase shifter]
Phase unbalance	≤±3° [phase diff. between different phase shifter]
Power handling	≥550W peak power, pulse bandwidth 32us; ≥10W average power
Surface Finish	Natural color conductive oxidation

Power control:

1. Truth table: 6 bit TTL control (0: TTL low logic, 1: TTL high logic)
2. Power supply: +5V/400mA, -28V/50mA

Y1	Y2	Y3	Y4	Y5	Y6	Phase shift Reference
0	0	0	0	0	0	0°
1	0	0	0	0	0	-5.625°
0	1	0	0	0	0	-11.25°
0	0	1	0	0	0	-22.5°
0	0	0	1	0	0	-45°
0	0	0	0	1	0	-90°
0	0	0	0	0	1	-180°
1	1	1	1	1	1	5.625°

Mechanical Specifications:

1. RF connector: SMA-F;
2. Surface Finish: Natural color conductive oxidation
3. Power control connector: J30J-51ZKP, Pin definition listed as below

Pin	1	2	3	4	5	6	7	8	9	10
Definition	Y1-1	Y2-1	Y3-1	Y4-1	Y5-1	Y6-1	Y1-2	Y2-2	Y3-2	Y4-2
Pin	11	12	13	14	15	16	17	18	19	20
Definition	Y5-2	Y6-2	Y1-3	Y2-3	Y3-3	Y4-3	Y5-3	Y6-3	Y1-4	Y2-4
Pin	21	22	23	24	25	26	27	28	29	30
Definition	Y3-4	Y4-4	Y5-4	Y6-4	Y1-5	Y2-5	Y3-5	Y4-5	Y5-5	Y6-5
Pin	31	32	33	34	35	36	37	38	39	40
Definition	Y1-6	Y2-6	Y3-6	Y4-6	Y5-6	Y6-6	+5V	+5V	+5V	+5V
Pin	41	42	43	44	45	46	47	48	49	50
Definition	+5V	+5V	-28V	-28V	-28V	-28V	-28V	-28V	GND	GND
Pin	51									
Definition	GND									

Environmental Specifications:

1. Operating temperature: -40°C~+70°C
2. Storage temperature: -55°C~+85°C

Outline Drawing:

