

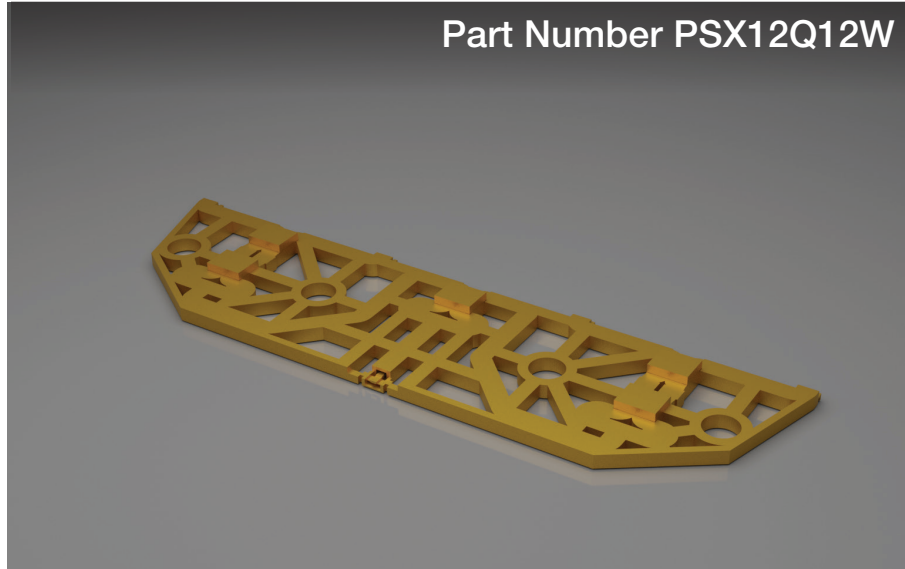
## Features and Benefits

- **Small Size and Lightweight**
- **Near Ideal Performance**
  - Low insertion loss
  - Good phase and amplitude balance
- **Precision**
  - Low part-to-part variation

## Applications

- EW
- Radar
- SIGINT

Part Number PSX12Q12W



## 6-18 GHz 4-Way Combiner

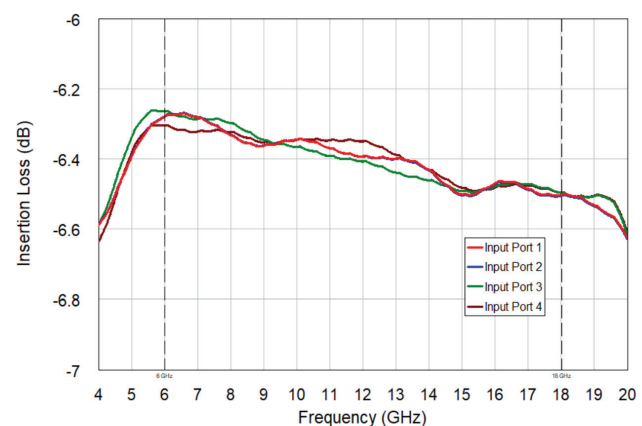
**High performance 4-way power combiner for 6-18 GHz applications.**

### Description

Nuvotronics PolyStrata® Technology provides low loss combining in a small form factor. This 4-way combiner covers 6-18 GHz with 0.4 dB insertion loss. It has four wirebond inputs and a coax output. Excellent amplitude and phase balance will result in best system level performance.

## Typical Electrical Performance

Parameter	Frequency Range (GHz)	Min	Typ	Max
Insertion Loss (dB)	6 - 18	-	0.4	0.5
Return Loss (dB)		12	15	-
Isolation (dB)		13	18	-
Phase Balance (deg)		-	+/- 0.2	+/- 1.0
Amplitude Balance (dB)		-	+/- 0.1	+/- 0.2



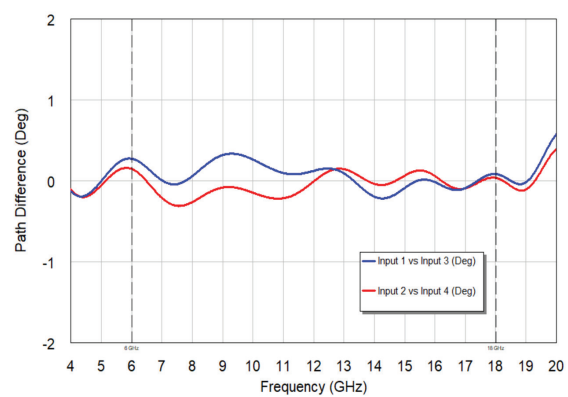
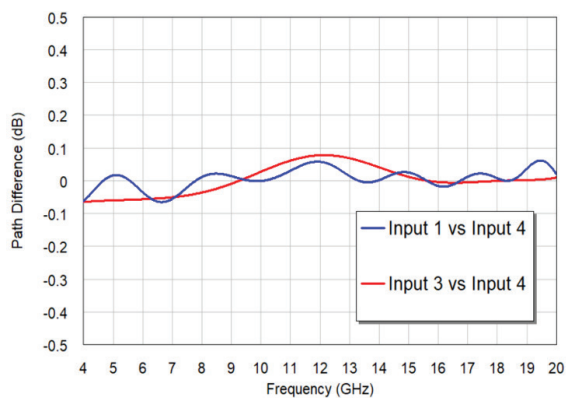
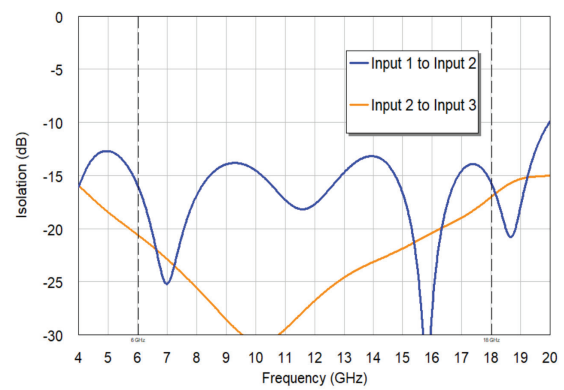
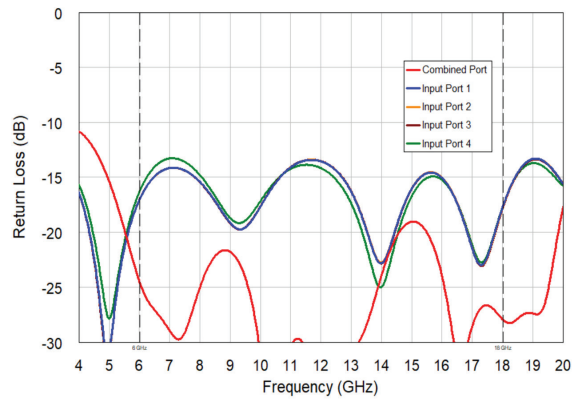
## Additional Details

Special Handling / Storage Instructions	
Storage	IAW IPC-4553A
EDS Sensitivity	None
Ordering Information	PSX12Q12W
Alternative Packaging Available	Waffle Pack
Component Termination Finish	Immersion Silver, Immersion Gold
Export Certifications	TBA

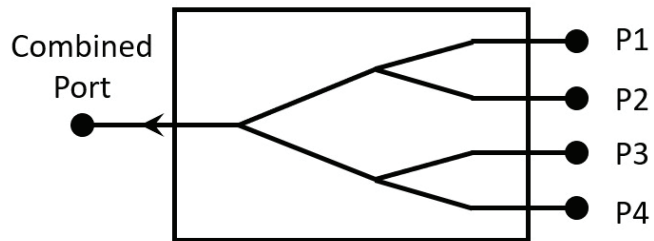
## Absolute Maximum Ratings

Power	Minimum 80W CW (Combined Output)*
Operating Temp	-55°C to 85°C
Solder Reflow	260°C max. for 10 seconds, 3 cycles
Epoxy Attach	150°C max. for 90 minutes

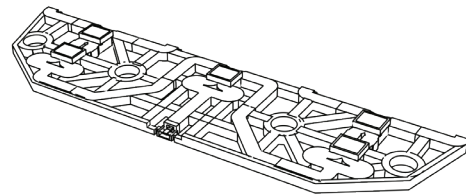
\*Power handling will vary depending on balance between the amplifiers and supports one amplifier failing.



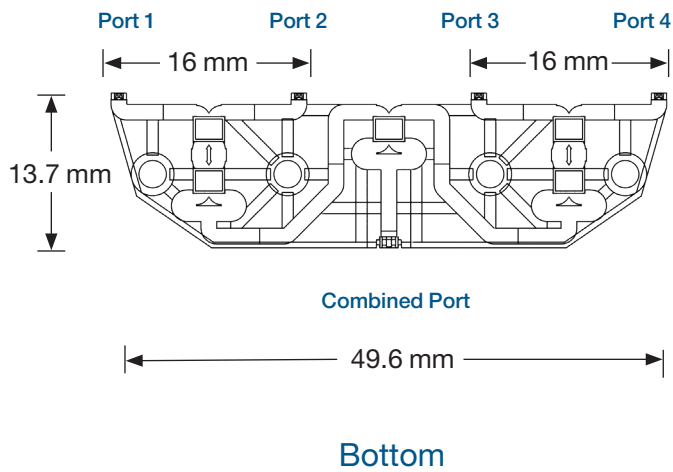
Simplified Block Diagram



Component View



Mechanical Drawing



Mechanical Drawing

