



#### **Features and Benefits**

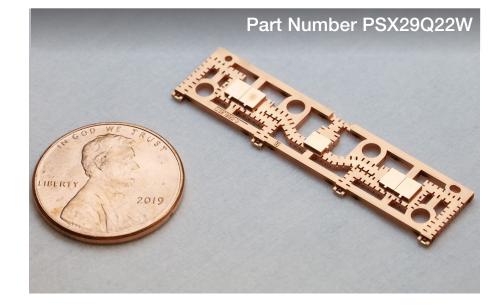
- Small Size and Lightweight
- Near Ideal Performance
  -Low insertion loss
  -Good phase and amplitude balance
- Precision -Low part-to-part variation

**Applications** 

• EW

• Radar

SIGINT



## 18-40 GHz 4-Way Combiner

# High performance 4-way power combiner for 18-40 GHz applications.

#### Description

Nuvotronics PolyStrata® Technology provides low loss combining in a small form factor. This 4-way combiner covers 18-40 GHz with 0.5 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	Тур	Max	-5			Input Port 1 Input Port 2 Input Port 3
nsertion Loss (dB)	18 - 40	-	0.4	0.7	6- (qB)			Input Port 4
Return Loss (dB)		13	15	-	sson -6.5			
solation (dB)		15	18	-	-6.5 Insertion 7-			
Phase Balance (deg)		-	+/- 0.5	+/- 1.0	-7.5			
Amplitude Balance (dB)		-	+/- 0.1	+/- 0.2	-8	Cela		40 0Hz
	11		1		16		26 28 30 32 3 Frequency (GHz)	4 36 38 40



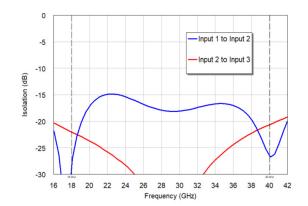
#### **Additional Details**

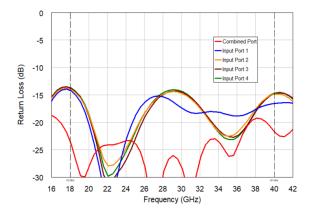
Special Handling / Storage Instructions				
Storage	IAW IPC-4553A			
ESD Sensitivity	None			
Ordering Information	PSX29Q22W			
Alternative Packaging Available	Waffle Pack			
<b>Component Termination Finish</b>	Immersion Silver, Immersion Gold			
Export Certifications	ТВА			

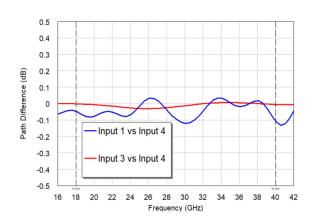
#### **Absolute Maximum Ratings**

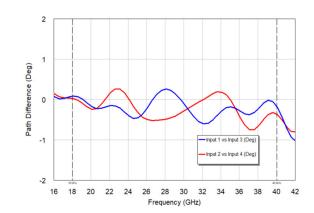
Power	Minimum 80W CW (Combined Output)*
Operating Temp	-55°C to 85°C
Solder Reflow	260°C max. for 10 seconds, 3 cycles
Epoxy Attach	150°C max. for 90 minutes

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





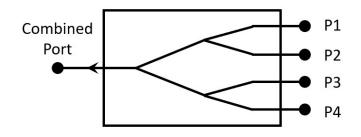


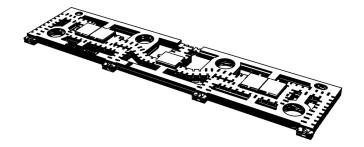




Simplified Block Diagram







### Mechanical Drawing

