



Ka Band Monopulse Comparator



MC22001



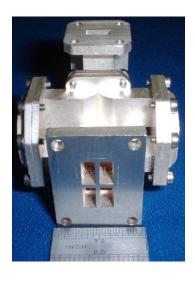
This ultra-compact high performance monopulse comparator has been designed for the aerospace market. It is constructed of 4 Precision Investment Castings but is also available as a machine from solid solution for smaller quantities. Its low mass and small space envelope make it ideal for operation in airborne environments either military or civilian.

Please contact our sales team if you would like to discuss your requirements. **T: 01751 432 355 E: info@sylatech.com**

SPECIFICATION

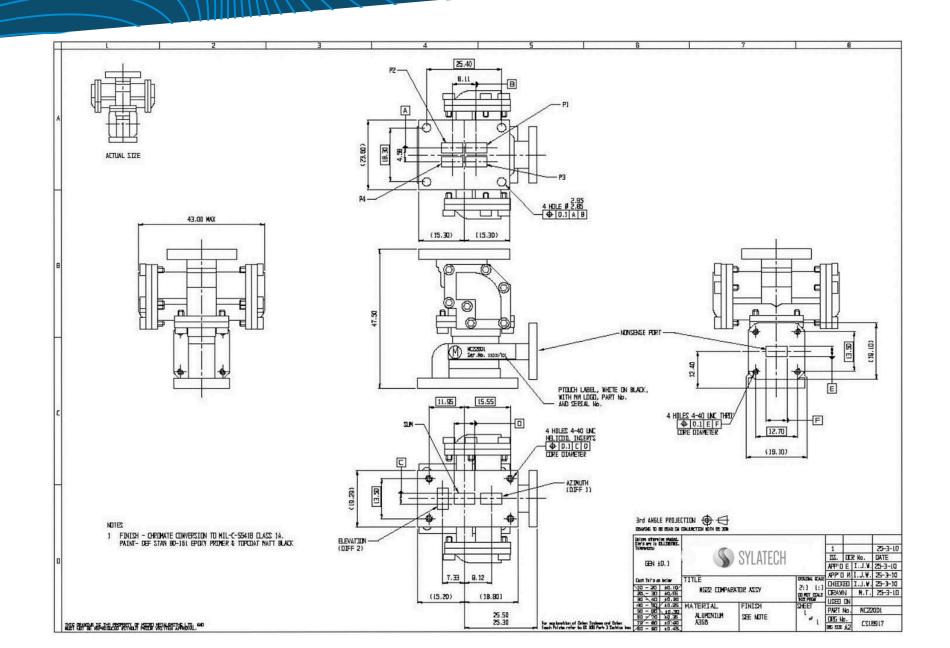
Frequency Range	Ka-Band (waveguide)	8.025 to 8.4 GHz
VSWR	SUM Port	1.3:1 Max
	DIFF Port	1.4:1 Max
Isolation	SUM - DIFF Port	30 dB Min
Amplitude Unbalance	SUM All Ports	+/- 0.15 dB Max
	DIFF All Ports	+/- 0.2 dB Max
Phase Unbalance	SUM to all Outputs	+/- 2° Max
	DIFF to all Outputs	+/- 3° Max
Mass	Estimated	40g
Space Envelope	Cubic	2" (50mm))











SYLATECH





CROSSGUIDE COUPLERS







WAVEGUIDE BENDS

STUB-TUNERS

LOOP COUPLERS











Slotted Array Antenna - Precision passive designs with exacting performance

- Monopulse Comparators Custom designs for narrowband frequencies
- **Power Dividers/Combiners** With minimal amplitude and phase unbalance
- **Rotating Joints** Single/multi-channel waveguide and coaxial options
- Crossguide Couplers Supports coupling across large bandwidths
- **Directional Couplers** Offering superior coupling and directivity
- **Loop Couplers** Single and dual configurations in compact designs
- Sidewall and Top Wall Couplers WG6 to WG22 with typical VSWR of 1.1:1
- Antenna Feeds Single and dual-bands with horizontal, vertical and circular polarisation.

- ▶ **OMT** Typical orthogonal isolation of better than 40dB
- **Stub Tuners** Double short and triple boss designs available
- **Loads and Attenuators** Suitable for low, medium and high power applications
- Waveguide Bends Available in E and H planes covering WG6 to WG25
- Flanges A range of plain, choke and double-ridged flanges are available
- Pressure Windows Covering a range of waveguide sizes from WG11 to WG22
- Magic Tees Offered as standard linear, folded E-plane and folded H-plane variants
- **Transitions** Available in a variety of waveguide and coaxial interfaces.



ENGINEERING YOUR FUTURE



SLOTTED ARRAY ANTENNAS

Sylatech delivers precision custom engineering solutions for our customers.

Operating from the UK, Sylatech has a global customer base across multiple business sectors including Aerospace, Space, Defence, Medical, Automotive and Construction.

As a trusted partner for delivering high quality systems and components to exacting standards, our customer base spans all tiers of the manufacturing supply chain.

Sylatech's service offering spans three core functions:

- > **RF and Microwave** custom design and manufacture of microwave sub-systems, assemblies and components.
- > Investment Casting Foundry manufacturing precision metal parts through lost-wax investment casting.
- > CNC Machining comprehensive machining delivering precision engineered metal components.







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