

30W 1-40 GHz 30 dB Directional Coupler



Features

Aluminum

Gray Paint

- High power handling capability up to 30W
- Ultra Wide band operation
- High directivity within operational band •
- Low Insertion loss
- Stable over temperature performance
- Aerospace and military application
- LMDS multi-carrier operation
- High peak to average handling capability
- All specifications can be modified upon request

Max.

40

31

±1.0

2.0

1.6

1.6

Units

GHz

dB

dB

dB

dB

:1

:1

W

w

Ohms

°C

ounces

| al Specifi | cations | | | | | | | |
|---------------------|--|---|--|--|---|--|--|---|
| neters | Min. | Тур. | Max. | Min. | Тур. | Max. | Min. | Тур. |
| cy Range | 1 | | 8 | 8 | | 18 | 18 | |
| Coupling | 29 | 30 | 31.5 | 29 | 30 | 31 | 29 | 30 |
| uency itivity | | ±0.8 | ±1.0 | | ±0.6 | ±1.0 | | ±0.6 |
| tivity | 15 | 18 | | 12 | 14 | | 10 | 12 |
| on Loss oupling) | | 0.6 | 1.0 | | 0.9 | 1.2 | | 1.5 |
| Primary | | 1.25 | 1.3 | | 1.3 | 1.5 | | 1.4 |
| econdary | | 1.25 | 1.3 | | 1.3 | 1.5 | | 1.4 |
| Average | 30 | | | | | | | |
| Peak | 300 | | | | | | | |
| dance | 50 | | | | | | | |
| ating erature | -45 to +85 | | | | | | | |
| ight | 2.46 | | | | | | | |
| Output lector | 2.92mm-Female | | | | | | | |
| | neters cy Range Coupling uency itivity ctivity on Loss oupling) Primary econdary Average Peak dance rating erature ight Output | cy Range 1 Coupling 29 uency itivity 15 on Loss oupling) Primary econdary Average Peak dance rating erature ight Output | neters Min. Typ. cy Range 1 Coupling 29 30 uency itivity 15 18 on Loss oupling) 0.6 Primary 1.25 econdary 1.25 Average 1 Peak 1.25 Average 1 Peak 1.25 | netersMin.Typ.Max.cy Range18Coupling293031.5uency itivity±0.8±1.0utivity1518on Loss oupling)0.61.0Primary1.251.3econdary1.251.3Average | netersMin.Typ.Max.Min.cy Range188Coupling293031.529uency itivity±0.8±1.012uency itivity151812on Loss oupling)0.61.012on Loss oupling)1.251.312on Loss oupling)1.251.312on Loss oupling)1.251.312on Loss oupling)1.251.312on Loss oupling)1.251.312on Loss oupling)1.251.312on Loss oupling)1.251.312on Loss oupling)1.251.312econdary1.251.312econdary1.251.312ht1.251.312ight1.251.312output1.251.312 | neters Min. Typ. Max. Min. Typ. cy Range 1 8 8 | neters Min. Typ. Max. Min. Typ. Max. cy Range 1 8 8 18 18 Coupling 29 30 31.5 29 30 31 uency itivity ± 0.8 ± 1.0 ± 0.6 ± 1.0 ± 0.6 ± 1.0 uency itivity 15 18 12 14 10 on Loss oupling) 0.6 1.0 0.9 1.2 Primary 1.25 1.3 1.3 1.5 econdary 1.25 1.3 1.3 1.5 Average | neters Min. Typ. Max. Min. Typ. Max. Min. Typ. Max. Min. cy Range 1 8 8 18 18 18 Coupling 29 30 31.5 29 30 31 29 uency titivity ± 0.8 ± 1.0 ± 0.6 ± 1.0 ± 1.0 ± 1.0 ± 0.6 ± 1.0 $\pm $ |

Complian

Material

Finishing



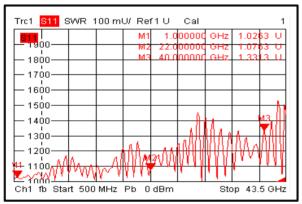
RF-LAMBDA LEADER OF BROADBAND SOLUTIONS

RFDC1G40G30

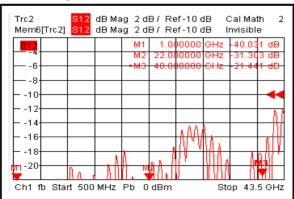
Environmental Specifications

| a | |
|------------------|--|
| Operational | |
| Temperature (°C) | -45 to +85 |
| Storage | |
| Temperature (°C) | -55 to +125 |
| | 30,000 ft. (Epoxy Seal Controlled environment) |
| Altitude | 60,000 ft 1.0psi min |
| | (Hermetically Seal Un-controlled environment) (Optional) |
| Vibration | 25g rms (15 degree 2KHz) |
| vibration | endurance, 1 hour per axis |
| Humidity | 100% RH at 35c, 95%RH at 40 deg c |
| Shock | 20G for 11msc half sin wave,3 |
| | axis both directions |

Primary VSWR

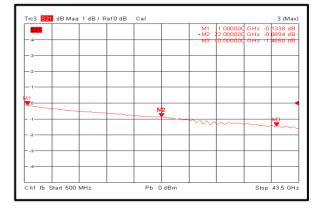


Directivity

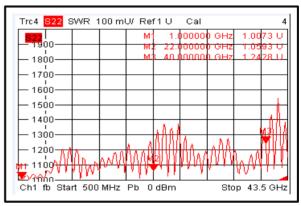


Typical Performance Plots

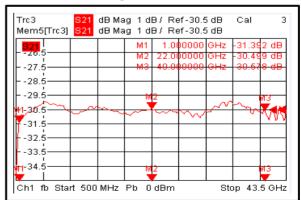
Insertion Loss



Secondary VSWR



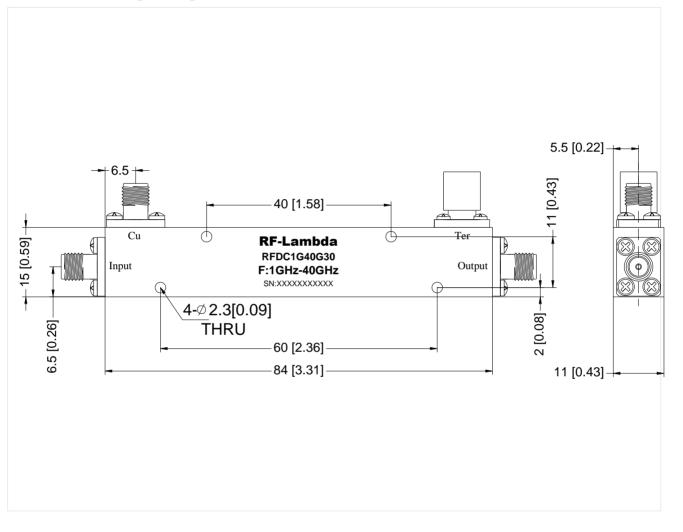
Nominal Coupling





Outline Drawing:

All Dimensions in mm [inches] Tolerance \pm 0.2 [0.008]



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Coaxial 30W 1-40 GHz 30 dB Directional Coupler

RFDC1G40G30