



PRINCIPAL SPECIFICATIONS

| Model Number | Frequency Range, GHz | Coupling, [⊠] dB, Nom. | Freq. Sensitivity, dB, Max. | Directivity, dB, | | *Insertion Loss, dB, Max. | VSWR, Max. Main Coupled Line | | Weight, oz.(g), Nom. | Outline Ref. Dim. |
|--------------|----------------------|---------------------------------|-----------------------------|------------------|------|---------------------------|------------------------------|--------|----------------------|-------------------|
| | | | | Typ. | Min. | | Line | Line | | |
| CYK-16R-21G | 2.0 - 40.0 | 16 ±1.0 | ±1.0 | 18 | 15 | 1.6 | 1.50:1 | 1.50:1 | 2.0 (56) | 1 |
| CYK-10R-26G | 6.0 - 40.0 | 10 ±1.0 | ±1.0 | 18 | 15 | 1.8 | 1.50:1 | 1.50:1 | 1.5 (43) | 2 |
| | 40.0 - 46.0 | | ±1.5 | 14 | 12 | | 1.70:1 | 1.70:1 | | |
| CYK-10R-29G | 18.0 - 40.0 | 10 ±1.0 | ±1.0 | 19 | 17 | 1.8 | 1.50:1 | 1.50:1 | 1.5 (43) | 2 |
| | 40.0 - 46.0 | | ±1.5 | 14 | 12 | | 1.70:1 | 1.70:1 | | |

⊠Coupling is referenced to the **output**

* Insertion Loss **above** Coupling Loss

POWER SPECIFICATIONS

| | | |
|------------------------|-----------------|---------------|
| Coupled "Loss": | 12 dB units: | 0.28 dB |
| | 16 dB units: | 0.11 dB |
| | 20 dB units: | 0.044 dB |
| Peak Power: | | 3 kW max. |
| Input Power (Forward): | | 25 Watts max. |
| Reflected Power: | 10/16 dB units: | 5 Watts max. |
| | 20/30 dB units: | 50 Watts max. |

GENERAL SPECIFICATIONS

| | |
|------------------------|------------------|
| Impedance: | 50 Ω nom. |
| Operating Temperature: | - 55° to +85°C |
| Options: | |
| Higher Frequencies: | Available |
| Alternate Connectors: | 2.4 mm available |
| Others: | Check factory |

General Notes:

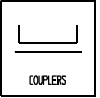
1. The CYK-R series of directional couplers consists of three port connectorized devices utilizing special stripline technology developed for very high directivity over very wide bandwidths.
2. Although the CYK-16R-21G is fully specified down to 2 GHz, it is usable down to 1 GHz with a higher coupling.
3. This series is ideally suited to precise measurement of forward or reflected power in general purpose ATE systems, as well as in EW and similar wideband systems where high directivity is essential.
4. Units with performance customized for your requirements are available. Options include coupling values up to 35 dB and with frequency coverage up to 50 GHz.
5. These units comply with MIL-C-15370 and may be supplied screened for compliance with additional specifications you designate for military and aerospace applications requiring the highest reliability.

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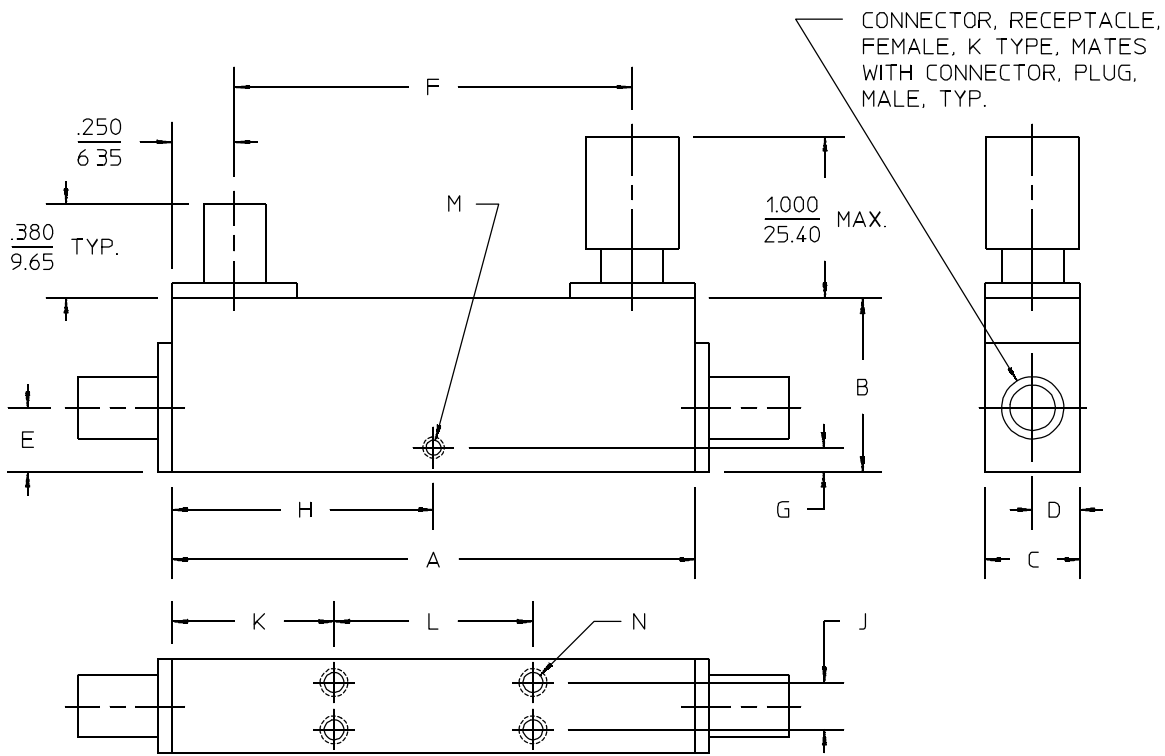
CYK-R-G Series

DIRECTIONAL COUPLERS

2 to 40 & 4 to 46 GHz / Ultra-Wideband / Very High Directivity / Stripline / 25 W / K-Connectors



Package Outline



| OUTLINE | A | B | C | D | E | F | G | H | J | K | L |
|---------|-----------------------|----------------------|----------------------|---------------------|---------------------|-----------------------|---------------------|----------------------|---------------------|----------------------|----------------------|
| 1 | $\frac{2.350}{59.69}$ | $\frac{.600}{15.24}$ | $\frac{.500}{12.70}$ | $\frac{.250}{6.35}$ | $\frac{.250}{6.35}$ | $\frac{1.850}{46.99}$ | — | — | $\frac{.265}{6.73}$ | $\frac{.770}{19.56}$ | $\frac{.800}{20.32}$ |
| 2 | $\frac{1060}{26.92}$ | $\frac{625}{15.88}$ | $\frac{500}{12.70}$ | $\frac{.250}{6.35}$ | $\frac{.250}{6.35}$ | $\frac{.560}{14.22}$ | $\frac{.120}{3.05}$ | $\frac{.530}{13.46}$ | — | — | — |

| OUTLINE | M | N | WT OZ. (G) |
|---------|---------------------------------|--|------------|
| 1 | — | #4-40 UNC-2B X .250 (6.35) DEEP 4 HOLES BOTH SIDES | 2.0 (57) |
| 2 | #2-56 UNC-2B X .120 (3.05) DEEP | — | 1.0 (28) |

NOTES: 1. Tolerance on 3 place decimals $\pm .020(.51)$ except as noted.
2. Dimensions in inches over mm

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