

.5-18 GHz

## SMA MAXIMALLY FLAT MINIATURE STRIPLINE COAXIAL COUPLERS

- Multi-Octave Frequency Coverage from 0.5 to 18 GHz
- Flat Frequency Response
- Small, Lightweight
- Operational to 105°C without degradation (125°C storage)
- Designed for MIL Environments

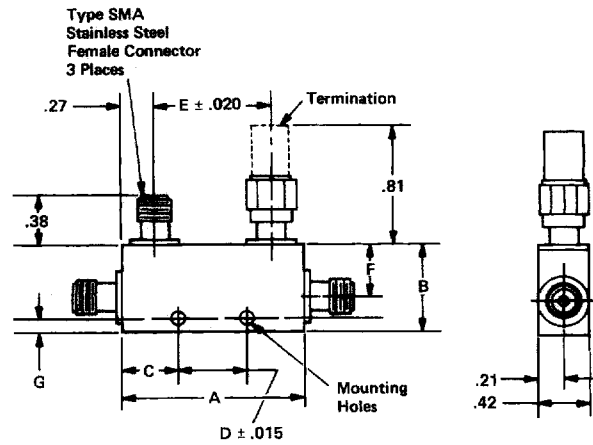
### SPECIFICATIONS

| FREQUENCY RANGE (GHz) | MODEL | NOMINAL COUPLING (dB) | DIRECTIVITY dB (Min) | INSERTION LOSS          |      | VSWR             |                    | FREQUENCY SENSITIVITY* (dB) Max | MAXIMUM DEVIATION from NOMINAL (dB) | POWER      |         | WEIGHT |          |
|-----------------------|-------|-----------------------|----------------------|-------------------------|------|------------------|--------------------|---------------------------------|-------------------------------------|------------|---------|--------|----------|
|                       |       |                       |                      | EXCLUDING COUPLED POWER | TRUE | PRIMARY LINE Max | SECONDARY LINE Max |                                 |                                     | AVG. Watts | PEAK kW | Oz     | Gr (Max) |
| 0.5-2                 | 4242  | 6                     | 22                   | 0.35                    | 2.00 | 1.20             | 1.20               | ±0.5                            | ±1.0                                | 50         | 3       | 2.5    | 71       |
|                       |       | 10                    | 22                   | 0.35                    | 0.90 | 1.20             | 1.20               | ±0.5                            | ±1.0                                | 50         | 3       | 2.5    | 71       |
|                       |       | 20                    | 22                   | 0.35                    | 0.40 | 1.20             | 1.20               | ±0.5                            | ±1.0                                | 50         | 3       | 2.5    | 71       |
| 1-3.5                 | 4243  | 6                     | 20                   | 0.35                    | 2.00 | 1.20             | 1.20               | ±0.3                            | ±1.0                                | 50         | 3       | 1.5    | 41       |
|                       |       | 10                    | 23                   | 0.35                    | 0.90 | 1.20             | 1.20               | ±0.3                            | ±1.0                                | 50         | 3       | 1.5    | 41       |
|                       |       | 20                    | 23                   | 0.35                    | 0.40 | 1.20             | 1.20               | ±0.4                            | ±1.0                                | 50         | 3       | 1.5    | 41       |
| 2-8                   | 4244  | 6                     | 20                   | 0.50                    | 2.20 | 1.30             | 1.30               | ±0.4                            | ±1.0                                | 50         | 3       | 1      | 29       |
|                       |       | 10                    | 20                   | 0.35                    | 0.90 | 1.25             | 1.25               | ±0.5                            | ±1.0                                | 50         | 3       | 1      | 29       |
|                       |       | 20                    | 20                   | 0.35                    | 0.40 | 1.25             | 1.25               | ±0.4                            | ±1.0                                | 50         | 3       | 1      | 29       |
|                       |       | 30                    | 20                   | 0.40                    | 0.40 | 1.25             | 1.25               | ±0.5                            | ±1.0                                | 50         | 3       | 1.3    | 35       |
| 4-12.4                | 4245B | 6                     | 16                   | 0.50                    | 2.20 | 1.30             | 1.30               | ±0.4                            | ±1.0                                | 50         | 3       | 0.7    | 21       |
|                       |       | 10                    | 16                   | 0.50                    | 1.20 | 1.30             | 1.30               | ±0.4                            | ±1.0                                | 50         | 3       | 0.7    | 21       |
|                       |       | 20                    | 15                   | 0.50                    | 0.60 | 1.30             | 1.30               | ±0.5                            | ±1.0                                | 50         | 3       | 0.8    | 24       |
|                       |       | 30                    | 15                   | 0.50                    | 0.50 | 1.30             | 1.30               | ±0.5                            | ±1.0                                | 50         | 3       | 0.8    | 24       |
| 6-18                  | 4246B | 6                     | 15                   | 0.80                    | 2.50 | 1.40             | 1.40               | ±0.5                            | ±1.0                                | 50         | 3       | 0.9    | 25       |
|                       |       | 10                    | 15                   | 0.60                    | 1.20 | 1.40             | 1.40               | ±0.5                            | ±1.0                                | 50         | 3       | 0.9    | 25       |
|                       |       | 20                    | 12                   | 0.60                    | 0.70 | 1.40             | 1.40               | ±0.5                            | ±1.0                                | 50         | 3       | 0.9    | 25       |
|                       |       | 30                    | 12                   | 0.60                    | 0.60 | 1.40             | 1.40               | ±0.5                            | ±1.0                                | 50         | 3       | 0.9    | 25       |

\*Frequency Sensitivity **included** in coupling value.

All connectors are SMA type.

OUTLINE DRAWINGS



| MODEL                  | A    | B    | C   | D     | E     | F   | G   | MOUNTING HOLES                          |
|------------------------|------|------|-----|-------|-------|-----|-----|---|
| 4242-6, 10             | 3.54 | 1.04 | .85 | 1.843 | 3.000 | .77 | .36 | .146 ±.005                              |
| 4242-20                | 4.04 | 1.04 | .77 | 2.500 | 3.500 | .77 | .16 | .146 ±.005                              |
| 4243-6, -10            | 2.92 | .67  | .48 | 1.968 | 2.384 | .34 | .15 | .146 ±.005                              |
| 4243-20                | 2.92 | .85  | .59 | 1.750 | 2.384 | .50 | .16 | .146 ±.005                              |
| 4244-6, -10, -20       | 1.81 | .67  | .47 | 0.875 | 1.274 | .34 | .15 | .146 ±.005                              |
| 4244-30                | 2.12 | .82  | .62 | 0.875 | 1.584 | .52 | .11 | .104 <sup>+0.004</sup> <sub>-.002</sub> |
| 4245B-6, -10, -20, -30 | 1.26 | .58  | .44 | .375  | .719  | .34 | .11 | .104 <sup>+0.004</sup> <sub>-.002</sub> |
| 4246B-6, -10, -20, -30 | 1.40 | .66  | .45 | .500  | .860  | .39 | .11 | .104 <sup>+0.004</sup> <sub>-.002</sub> |

All dimensions are Max. unless otherwise specified.