

FREQUENCY BAND DESIGNATOR



FREQUENCY BANDS

| MILITARY RADAR | L | S | C | X | Ku | K | Ka | | V | | |
|-----------------|-------|---|----------|---|--------|--------|----|--------|--------|--------|--------|
| QUICK FREQUENCY | 4 GHz | | 12.4 GHz | | 18 GHz | 30 GHz | | 35 GHz | 40 GHz | 45 GHz | 60 GHz |

CABLE SELECTION GUIDE BY FREQUENCY SORTED BY MAX ATTENUATION & FAMILY (dB per 100 feet)

LAB-FLEX® LOW-LOSS, FLEXIBLE

| | | | | | | | | | | | |
|---------------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| Lab-Flex® 290 | 6.3 | 9.1 | 13.1 | 16.4 | 20.5 | | | | | | |
| Lab-Flex® 335 | 6.7 | 9.8 | 14.5 | 18.4 | 23.4 | | | | | | |
| Lab-Flex® 200 | 11.3 | 16.5 | 24.1 | 30.3 | 38.3 | 47.6 | | | | | |
| Lab-Flex® 160 | 15.8 | 22.7 | 33.0 | 41.6 | 51.6 | 63.5 | 69.0 | 75.4 | 81.6 | | |
| Lab-Flex® 125 | 22.3 | 31.9 | 39.5 | 57.1 | 71.0 | 86.9 | 94.1 | 102.5 | 110.5 | 118.4 | 125.4 |

LAB-FLEX® \$ LOW-LOSS, FLEXIBLE, STRANDED CENTER CONDUCTOR

| | | | | | | | | | | | |
|--------------------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| Lab-Flex® \$ 490S | 5.0 | 7.5 | 11.3 | 13.0 | | | | | | | |
| Lab-Flex® \$ 335SP | 8.8 | 13.2 | 20.4 | 26.5 | 34.8 | | | | | | |
| Lab-Flex® \$ 235SP | 14.4 | 20.7 | 30.2 | 37.7 | 47.4 | 58.5 | | | | | |
| Lab-Flex® \$ 180SP | 20.7 | 30.1 | 44.2 | 55.8 | 70.6 | 88.0 | 96.0 | 105.5 | 114.6 | | |
| Lab-Flex® \$ 115S | 35.7 | 51.3 | 74.1 | 92.4 | 115.5 | 141.9 | 153.9 | 168.0 | 181.5 | 194.3 | 230.1 |

SEMI-RIGID, LOW-LOSS

| | | | | | | | | | | | |
|---------------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| .250 Low-Loss | 7.0 | 10.0 | 14.2 | 17.6 | 21.8 | 34.0 | | | | | |
| .141 Low-Loss | 15.9 | 22.8 | 32.9 | 40.8 | 50.9 | 62.4 | 67.5 | 73.7 | | | |
| .085 Low-Loss | 28.3 | 40.3 | 57.6 | 71.2 | 88.1 | 107.0 | 115.5 | 125.5 | 134.8 | 143.7 | 168.1 |

SEMI-RIGID, CONFORMABLE® (BJ), FLEXIBLE VERSION (MINI-FLEX)

| | | | | | | | | | | | |
|---------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| .250 Series (RG401) | 10.4 | 16.1 | 25.5 | 33.9 | 45.5 | | | | | | |
| .141 Series (RG402) | 16.5 | 24.8 | 37.9 | 49.0 | 64.0 | 82.2 | 90.7 | 101.1 | | | |
| Mini-Flex 165 | 17.2 | 25.7 | 39.1 | 50.6 | 65.9 | | | | | | |
| .085 Series (RG405) | 27.9 | 40.8 | 60.5 | 76.7 | 97.9 | 123.0 | 134.6 | 148.5 | 161.8 | 174.7 | 199.4 |
| Mini-Flex 105 | 30.6 | 44.6 | 66.0 | 83.4 | 106.1 | | | | | | |
| .047 Series | 47.8 | 68.9 | 100.3 | 125.5 | 157.6 | 194.7 | 211.6 | 231.7 | 250.8 | 269.1 | 286.7 |

STANDARD FLEXIBLE

| | | | | | | | | | | | |
|-------|------|------|------|-------|-------|--|--|--|--|--|--|
| SF142 | 18.0 | 26.8 | 40.7 | 52.5 | 68.3 | | | | | | |
| RG142 | 18.9 | 28.1 | 42.5 | | | | | | | | |
| 142D | 24.7 | 37.8 | 59.4 | 78.2 | 104.0 | | | | | | |
| SF316 | 37.3 | 54.1 | 79.4 | 99.8 | 126.3 | | | | | | |
| RD316 | 37.6 | 54.6 | 80.0 | 100.6 | | | | | | | |
| 316D | 39.0 | 57.1 | | | | | | | | | |

LMR®

| | | | | | | | | | | | |
|----------|------|------|------|--|--|--|--|--|--|--|--|
| LMR®-400 | 6.3 | 9.0 | 10.8 | | | | | | | | |
| LMR®-240 | 11.5 | 16.6 | 20.4 | | | | | | | | |

Note: There are several versions of frequency band allocations and this chart should be used as reference only.

To select a cable first determine the maximum frequency the cable assembly needs to operate at. Cables under that frequency are listed by lowest (dB) attenuation first.

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