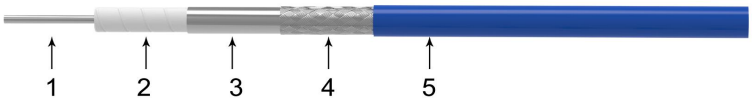
# Economical Low Loss Flexible Cable

**LE520** Rev3

## Features & Benefits

- Attractive cost vs performance ratio
- Low Loss,high power handling
- Good amplitude stability vs flex
- Up to 13.5 GHz

## Cable Construction




| No. | Construction | Size（mm） | Materials |
|---|---|---|---|
| 1 | Center conductor | 1.45 | Solid silver plated copper |
| 2 | Dielectric | 4.30 | Low density PTFE |
| 3 | Outer conductor | 4.38 | Aluminum foil wrap |
| 4 | Outer sheild | 4.78 | Silver-plated copper wire braid |
| 5 | Jacket | 5.20 | FEP |

## Electrical

| | |
|---|---|
| Frequency | DC-13.5 GHz |
| Impedance | 50 Ω |
| Velocity of Propagation | 76% |
| Shielding Effectiveness | >90 dB |
| Withstanding Voltage | 1500 V |
| Mechanical Phase Stability* | <±6º@ DC-13.5GHz |
| Amplitude Stability vs Shaking | <±0.1dB |

* Wrapped 360˚ around a 52mm radius mandrel.

## Mechanical & Environmental

| | |
|---|---|
| Min.Bending Radius Static | 20mm |
| Min. Bending Radius Repeated | 52mm |
| Weight | 60g/m |
| Temperature(Operation) | -55～150 ºC |
| Temperature(Storage) | -60～160 ºC |

## Attenuation(Typical@25℃&VSWR=1.0) & Power(VSWR=1.0; 40℃; Sea level)

| Frequency MHz | 300 | 1000 | 1400 | 4000 | 6000 | 8000 | 10000 | 10500 | 11000 | 12400 | 13500 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| dB/100 Meter | 12.8 | 23.8 | 28.4 | 49.8 | 62.1 | 72.9 | 82.7 | 85.0 | 87.3 | 93.4 | 98.1 |
| Avg.Power kW | 1.428 | 0.766 | 0.642 | 0.366 | 0.293 | 0.250 | 0.220 | 0.214 | 0.209 | 0.195 | 0.186 |

K1=0.718000 K2=0.001088

Attenuation at any frequency＝[K1×SQRT(FMHz)]+[K2×FMHz]

## Available connectors

| Cable P/N | Connectors | Gender | Orientation | Mounting | Max Freq.(GHz) | VSWR Max |
|---|---|---|---|---|---|---|
| LE520 | SMA | M/F | Straight | Standard | 13.5 | 1.25/1.3 |
| LE520 | N | M/F | Straight | Standard | 13.5 | 1.3 |
| LE520 | N | Male | Right Angle | Standard | 13.5 | 1.35 |
| LE520 | TNC | Male | Straight | Standard | 13.5 | 1.35 |
| LE520 | TNC | Male | Right Angle | Standard | 13.5 | 1.4 |

Other connectors available upon request.