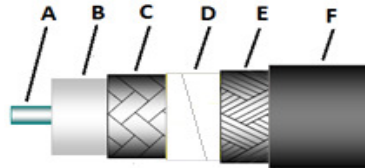


# CABLE SPECIFICATIONS

## Lab-Flex® 335



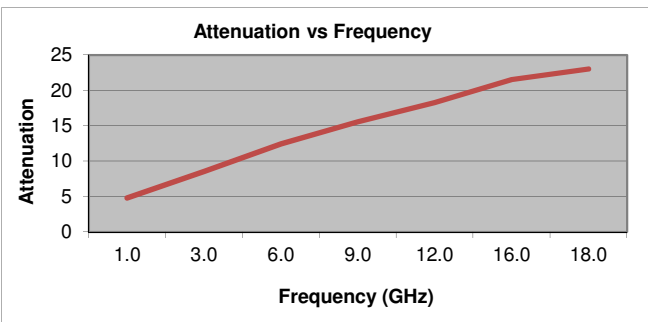
Lab-flex ® 335 is designed as a low loss replacement for Solid Dielectric cables such as RG214 & RG393. With 80% Velocity expanded PTFE dielectric, the Lab-Flex 335 cable has 40% lower loss than solid dielectrics of the same size.



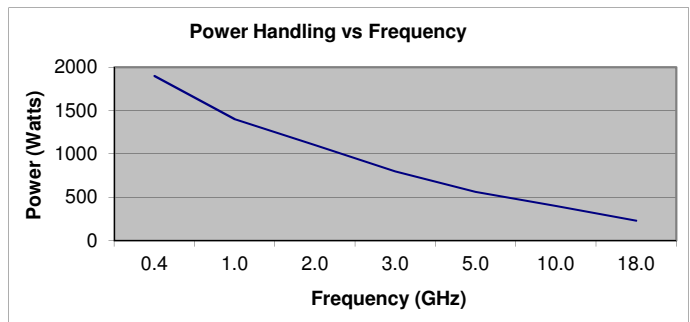
| 1.0 Electrical Data                     |         |      |   |
|---|---------|------|---|
| Frequency, Max (GHz)                    | 18.0    |      |   |
| Impedance, nominal (Ω)                  | 50      |      |   |
| Velocity of Propagation (%)             | 80      |      |   |
| Shielding Effectiveness, 18 GHz (dB/ft) | >-90dB  |      |   |
| Capacitance (pF/ft)                     | 25      |      |   |
| Delay (ns/ft), (ns/meter)               | 1.27    | 4.17 |   |
| Attenuation k1 (db/100ft) @ 23 deg C    | 0.14612 |      | Attenuation (Typical) at any Frequency<br>=k1 x SqRt (FMHz) + k2 x (FMHz) |
| Attenuation k2 (db/100ft) @ 23 deg C    | 0.00019 |      |   |

| 2.0 Mechanical/Environmental Data |              |       |  |
|-----------------------------------|--------------|-------|--|
| Weight (lbs/100ft), (Kg/100m)     | 8.50         | 12.78 |  |
| Temperature Range (°C)            | -55 to +200* |       |  |
| Minimum Bend Radius (inch), (mm)  | 2.00         | 50.80 |  |

| 3.0 Construction Data      |   |       |                |
|----------------------------|---|-------|----------------|
| Inner Conductor (inch)     | A | -     | Solid SPC      |
| Dielectric (inch)          | B | -     | Expanded PTFE  |
| First Outer Shield (inch)  | C | -     | Flat Braid SC  |
| Second Outer Shield (inch) | D | -     | Metalized Tape |
| Third Outer Shield (inch)  | E | -     | Round Braid SC |
| Jacket (inch O.D.)         | F | 0.335 | FEP            |



(dB per 100 feet)



\*CW Power in watts at sea level and 23°C

|                       |     |     |      |      |      |      |
|-----------------------|-----|-----|------|------|------|------|
| Frequency GHz         | 1.0 | 3.0 | 10.0 | 12.0 | 16.0 | 18.0 |
| Typical Loss dB/100ft | 4.8 | 8.6 | 16.5 | 18.3 | 21.5 | 23.0 |

|                   |        |       |       |       |       |       |
|-------------------|--------|-------|-------|-------|-------|-------|
| Frequency GHz     | 1.0    | 3.0   | 10.0  | 12.0  | 16.0  | 18.0  |
| CW Power in Watts | 1400.0 | 800.0 | 400.0 | 370.0 | 300.0 | 230.0 |

# CABLE SPECIFICATIONS

## Lab-Flex® 335



DATA SHEET PART SERIES: Lab-Flex® SHEET 2 OF 2 Revision 0916

### Standard Connectors:

| Cable Code | Connector Code | Series | Gender            | Type     | C-Nut Style* | Body Material* | Body Finish* | Loss per GHz | Frequency Max GHz |
|------------|----------------|--------|-------------------|----------|--------------|----------------|--------------|--------------|-------------------|
| 335        | SMS            | SMA    | (Male)            | Straight | H            | SS             | P            | 0.012        | 18                |
| 335        | SMR            | SMA    | (Male)            | R/A      | H            | SS             | P            | 0.023        | 18                |
| 335        | SFBS           | SMA    | (Female) Bulkhead | Straight | N/A          | SS             | P            | 0.015        | 18                |
| 335        | SFS            | SMA    | (Female)          | Straight | N/A          | SS             | P            | 0.015        | 18                |
| 335        | NMS            | Type-N | (Male)            | Straight | HK           | SS             | P            | 0.011        | 18                |
| 335        | NMR            | Type-N | (Male)            | R/A      | H            | SS             | P            | 0.02         | 18                |
| 335        | NFBS           | Type-N | (Female) Bulkhead | Straight | N/A          | SS             | P            | 0.015        | 18                |
| 335        | NFS            | Type-N | (Female)          | Straight | N/A          | SS             | P            | 0.015        | 18                |
| 335        | TMS            | TNC    | (Male)            | Straight | H            | SS             | P            | 0.01         | 18                |
| 335        | TMR            | TNC    | (Male)            | R/A      | H            | SS             | P            | 0.02         | 18                |
| 335        | TFBS           | TNC    | (Female) Bulkhead | Straight | N/A          | SS             | P            | 0.015        | 18                |
| 335        | TFS            | TNC    | (Female)          | Straight | N/A          | SS             | P            | 0.015        | 18                |
| 335        | SCMS           | SC     | (Male)            | Straight | H            | SS             | P            | 0.01         | 10                |
| 335        | SCMR           | SC     | (Male)            | R/A      | H            | SS             | P            | 0.02         | 10                |
| 335        | SCFBS          | SC     | (Female)          | Straight | N/A          | SS             | P            | 0.015        | 10                |

\* C-nut Style: H= Hex, K=Knurled, HK= Hex Nut & Knurled  
 \*Body Materials: B=Brass, SS=Stainless Steel, Be= Beryllium Copper  
 \*Body Finish: N= Nickel, S=Silver, G=Gold, P= Passivated, T= Tri-metal  
 Sex of connector is determined by center pin

### Standard Options:

| Cable Code | Option Code | Option Description                    | Option Details                     |
|------------|-------------|---------------------------------------|------------------------------------|
| 335        | A           | Phase Match                           | Standard Tolerance of +/-2.8PS     |
| 335        | AW          | RoHS Compliant                        | Per EU Directive 2002/95/EC        |
| 335        | W           | Weatherized                           | Weatherized Jacket (With Pel-Seal) |
| 335        | D/DD        | Dust Cap one side/Both Sides          | Dust Cap with 4" Chain             |
| 335        | E/EE        | Extended Booting One Side/ Both Sides |                                    |

\*for RoHS complaint assemblies (-ROHS) is required to be added to end of standard part number  
 ex. NMS-335-120.0-NMS-ROHS

\*for Phase Matched assemblies (+/-2.8ps) is required to be added to end of standard part number  
 ex. NMS-335-120.0-NMS +/-2.8ps

### Custom Options:

The above connectors and options the most common types used. Florida RF Labs offers a wide range of cables, connectors and options. If you do not see an option you require please consult the sales department.