

CABLE SPECIFICATIONS

Lab-Flex® 200UV

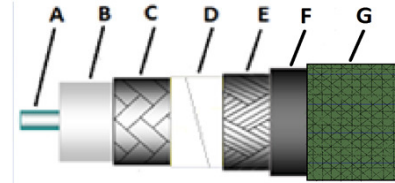


DATA SHEET PART SERIES: Lab-Flex®

SHEET 1 OF 2

Revision
0916

Lab-flex® 200UV cable is designed for Ultra-Low VSWR performance and high flexure applications due to the unique construction aspects that work to enhance flexure life.



1.0 Electrical Data

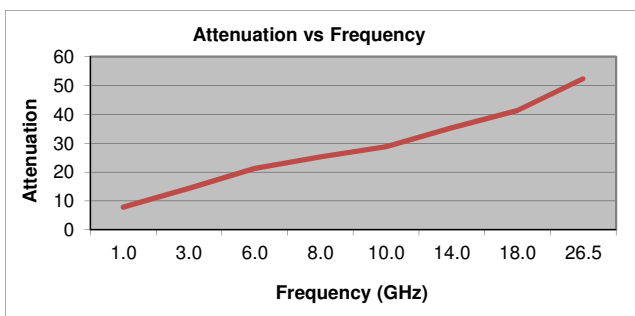
| | | | |
|---|---------|----------|---|
| Frequency, Max (GHz) | 26.5 | | |
| Impedance, nominal (Ω) | 50 | | |
| Velocity of Propagation (%) | 78 | | |
| Shielding Effectiveness, 18 GHz (dB/ft) | >-90dB | | |
| Capacitance (pF/ft) | 26 | | |
| Delay (ns/ft), (ns/meter) | 1.3 | 4.268504 | |
| Attenuation k1 (db/100ft) @ 23 deg C | 0.23 | | Attenuation (Typical) at any Frequency =k1 x SqRt (FMHz) + k2 x (FMHz) |
| Attenuation k2 (db/100ft) @ 23 deg C | 0.00058 | | |

2.0 Mechanical/Environmental Data

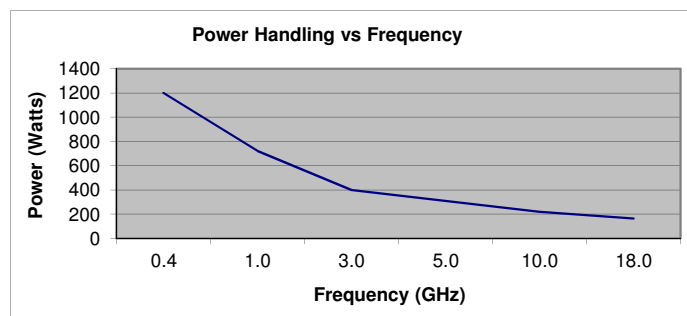
| | | | |
|----------------------------------|-------------|-------|--|
| Weight (lbs/100ft), (Kg/100m) | 5.60 | 8.42 | |
| Temperature Range (°C) | -55 to +200 | | |
| Minimum Bend Radius (inch), (mm) | 1.00 | 25.40 | |

3.0 Construction Data

| | | | |
|-------------------------|---|-------|--------------------------------|
| Inner Conductor | A | - | Solid SPC |
| Dielectric | B | - | Expanded PTFE |
| First Outer Shield | C | - | SPC Flat Braid |
| Second Outer Shield | D | - | Carbon Teflon Tape |
| Third Outer Shield | E | - | SPC Round Braid |
| Jacket | F | | FEP |
| Outer Braid (inch O.D.) | G | 0.240 | Nomex (Green with Blue Tracer) |



(dB per 100 feet)



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

| | | | | | | |
|-----------------------|-----|------|------|------|------|------|
| Frequency GHz | 1.0 | 3.0 | 6.0 | 12.0 | 18.0 | 26.5 |
| Typical Loss dB/100ft | 7.8 | 14.3 | 21.3 | 32.2 | 41.4 | 52.9 |

| | | | | | | |
|-------------------|--------|-------|-------|-------|-------|-------|
| Frequency GHz | 0.4 | 1.0 | 3.0 | 5.0 | 10.0 | 18.0 |
| CW Power in Watts | 1200.0 | 720.0 | 400.0 | 310.0 | 220.0 | 165.0 |

CABLE SPECIFICATIONS

Lab-Flex® 200UV



Standard Connectors:

| Cable Code | Connector Code | Series | Gender | Type | C-Nut Style* | Body Material* | Body Finish* | Loss per GHz | Frequency Max GHz |
|------------|----------------|--------|-------------------|-------------|--------------|----------------|--------------|--------------|-------------------|
| 200UV | KMS | 2.9mm | (Male) | Straight | H | SS | P | 0.01 | 26 |
| 200UV | SMS | SMA | (Male) | Straight | H | SS | P | 0.01 | 18 |
| 200UV | SMR | SMA | (Male) | Right Angle | H | SS | P | 0.02 | 18 |
| 200UV | SFBS | SMA | (Female) Bulkhead | Straight | N/A | SS | P | 0.015 | 18 |
| 200UV | SFS | SMA | (Female) | Straight | N/A | SS | P | 0.015 | 18 |
| 200UV | NMS | Type-N | (Male) | Straight | HK | SS | P | 0.011 | 18 |
| 200UV | NMR | Type-N | (Male) | Right Angle | H | SS | P | 0.02 | 18 |
| 200UV | NFBS | Type-N | (Female) Bulkhead | Straight | N/A | SS | P | 0.015 | 18 |
| 200UV | NFS | Type-N | (Female) | Straight | N/A | SS | P | 0.015 | 18 |
| 200UV | TMS | TNC | (Male) | Straight | H | SS | P | 0.01 | 18 |
| 200UV | TMR | TNC | (Male) | Right Angle | H | SS | P | 0.02 | 18 |
| 200UV | TFBS | TNC | (Female) Bulkhead | Straight | N/A | SS | P | 0.015 | 18 |
| 200UV | TFS | TNC | (Female) | Straight | N/A | SS | P | 0.015 | 18 |

* 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 |
|------------|-------------|---------------------------------------|--|
| 200UV | +/-2.8PS | Phase Match | Standard Tolerance of +/-2.8PS |
| 200UV | RoHS | RoHS Compliant | Per EU Directive 2002/95/EC |
| 200UV | A | Armor | SS interlock armor |
| 200UV | W | Weatherized | Weatherized Jacket (With Pel-Seal) |
| 200UV | AW | Armor/Weatherized | SS interlock armor with extruded PVC cover |
| 200UV | D/DD | Dust Cap one side/Both Sides | |
| 200UV | 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-200UV-120.0-NMS-ROHS

*for phase matched assemblies (+/-2.8PS) is require to be added to the end of standard part number
ex. NMS-200UV-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.