W2 Series are complete line of high performance flexible microwave cable assemblies. Specially, W251 series have flexible cable characteristics and FEP Solid structure to achieve velocity propagation of $76 \%$.

W251 series have excellent RF performance up to 40 \& 50 GHz with 2.92 mm \& 2.4 mm connectors, respectively.

## Features

- Center Conductor : Silver Plated Copper
- Insulator : FEP Solid
$-1^{\text {st }}$ Outer Conductor: Flat Wire SPC
- $2^{\text {nd }}$ Outer Conductor: Cooper Foil
- Outer Shields :44 AWG Braid
- Jacket : FEP



## Specification

| Scope | Specification |  | W251 (40 \& 50 GHz ) |
| :---: | :---: | :---: | :---: |
| Physical | Center Conductor (mm) |  | 0.57 |
|  | Insulator (mm) |  | 1.85 |
|  | $1^{\text {st }}$ Outer Conductor (mm) |  | 2.05 |
|  | $2^{\text {nd }}$ Outer Conductor (mm) |  | 2.10 |
|  | Shield (mm) |  | 2.29 |
|  | Jacket |  | 2.66 |
| Electrical | Impedance |  | $50 \pm 1 \mathrm{Ohm}$ |
|  | Velocity of Propagation (\%) |  | Typical 76 |
|  | Capacitance |  | $85 \mathrm{pF} / \mathrm{m}$ |
|  | VSWR <br> (based on connector selection) |  | 1.35 (40 \& 50 GHz ) |
|  | Attenuation at $20^{\circ} \mathrm{C}$ (including connector loss) | at 6 GHz | $1.8 \mathrm{~dB} / \mathrm{m}$ |
|  |  | at 10.0 GHz | $2.4 \mathrm{~dB} / \mathrm{m}$ |
|  |  | at 18.0 GHz | $3.4 \mathrm{~dB} / \mathrm{m}$ |
|  |  | at 26.5 GHz | $4.3 \mathrm{~dB} / \mathrm{m}$ |
|  |  | at 40.0 GHz | 5.6 dB /m |
|  |  | at 50.0 GHz | $6.5 \mathrm{~dB} / \mathrm{m}$ |
| Mechanical \& Environmental | Weight (g/M) |  | 19 |
|  | Min. Bend Radius (mm) |  | 6.0 |
|  | Temperature (Storage) |  | $-65 \sim+125^{\circ} \mathrm{C}$ |

## Test Result

## W251 cable assembly

Part No. : W251-KM1KM1-1M

- Frequency : 10 MHz to 40 GHz
- Connector : 2.92 mm (Male)
- Cable Length :1 meter



Selection Guide


Cable Type Connector Type
Cable Length

W251
KM1 : 2.92 mm Male
KF1 : 2.92 mm Female
2M1 : 2.4 mm Male
2F1 : 2.4 mm Female
Unit : Meter


