

MS-325
SEMI RIGID CABLE

SCOPE

This specification covers the requirement for MS325, semi-rigid cable: .325 inch copper outer conductor, solid PTFE dielectric and stranded silver plated copper center conductor.

MECHANICAL

INNER CONDUCTOR: 7 x 0.0312 +/-0.001 inch (0.792 +/- 0.025 mm)
Stranded silver plated copper wire, per ASTM B-298 and ASTM B-8

DIELECTRIC: Solid PTFE Teflon, type F1, per ASTM D-1457.
Outer diameter 0.285+/-0.002 inch (7.239 +/-0.051 mm).

OUTER CONDUCTOR: Solid seamless copper tubing per WW-T-799.
Outer diameter 0.325+/-0.002 inch (8.255+/-0.051mm)

BEND RADIUS: .75 inch (19.1 mm) minimum for 360 degree excursion

WEIGHT: 14.5 lbs per 100 feet 21.6 kg per 100 meters

OPERATING TEMP: 90° C maximum

ELECTRICAL

CHARACTERISTIC IMPEDANCE: 50 +/- 2.0 ohms

VELOCITY OF PROPAGATION: 69.5% nominal

DIELECTRIC CONSTANT: 2.01 nominal

VOLTAGE WITHSTANDING: 7500 vrms @ 60 hz

CORONA EXTINCTION VOLTAGE: 3000 vrms @ 60 hz

MAXIMUM OPERATING FREQUENCY: 14 GHz

TYPICAL ATTENUATION:

Frequency(GHz)	db/100ft	db/100m
0.5	3.5	11.5
1.0	5.2	17.1
5.0	13.8	45.3
10.0	22.0	72.2