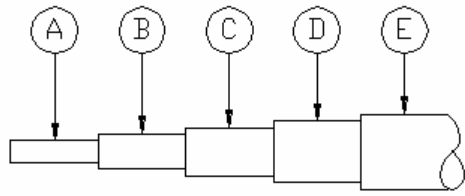


TENSOLITE CABLE DATA SHEET



CABLE CODE: TLL40-1111A
CATEGORY: LOW LOSS
DESCRIPTION: N/A
IMPEDANCE: 50 OHMS
MAX. OD: 0.133 INCHES
MAX. OPERATING FREQ.: 40 GHz.
CUT OFF FREQ.: 49.0 GHz.
CLAMP CABLE GROUP: N/A
SOLDER CABLE GROUP: N/A
CRIMP CABLE GROUP: N/A
MIL SPEC: N/A
FLORIDA PART X REF.: TLL40-1111A

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SOLID SILVER-PLATED COPPER	0.030
B. DIELECTRIC:	PTFE	0.087
C. INNER BRAID:	HELICALLY-WRAPPED SILVER-PLATED COPPER	0.096
D. OUTER BRAID:	SILVER-PLATED ROUND COPPER BRAID	0.116
E. JACKET:	SOLID FEP, COLOR "SAW GRASS GREEN"	0.128

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 30 (tested 20lbs) POUNDS MINIMUM AXIAL PULL
MINIMUM BEND RADIUS (ONE TIME): 0.50 INCHES FIXED INSTALLATION
TEMPERATURE RANGE: -60 / +200 DEGREES CELSIUS
WEIGHT MAXIMUM: 0.018 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 1.10 OHMS / 100 FEET NOMINAL
OUTER CONDUCTOR DC RESISTANCE 4.03 OHMS / 100 FEET NOMINAL
NOMINAL IMPEDANCE: 50 OHMS
NOMINAL CAPACITANCE: 26.4 pf / FT.
NOMINAL INDUCTANCE: 0.066 uh / FT
NOMINAL VELOCITY OF PROPAGATION: 77.0 %
NOMINAL DELAY: 1.32 nS / FT.
MAXIMUM OPERATING VOLTAGE: 1411 VRMS
MAXIMUM CW POWER RATING: 18 WATTS AT 40 GHz
MAXIMUM RETURN LOSS: -19 dB AT 40 GHz
MAXIMUM INSERTION LOSS: 100.8 dB / 100 FT AT 40 GHz
NOMINAL INSERTION LOSS: 91.6 dB / 100 FT AT 40 GHz
 To calculate maximum insertion loss at any frequency use the formula below:
 $13.283 \text{ times square root of freq.} + 0.414 \text{ times freq.} + 0.2 = \text{dB}/100'$
RELATIVE SHIELDING: -90?? dB DOUBLE SHIELDED

FEATURES: SEMI-RIGID REPLACEMENT CABLE
 EASILY FORMS INTO DESIRED SHAPE AND MAINTAINS ELECTRICAL PERFORMANCE

