INFORMATION CONTAINED WITHIN THIS ROSNOL RF/MICROWAVE TECHNOLOGY CORP. DOCUMENT IS CONSIDERED PROPRIETARY AND IS THE PROPERTY OF ROSNOL RF/MICROWAVE TECHNOLOGY CORP.

SPECIFICATION CONTROL DRAWING

REVISION			
REV.	DESCRIPTION	DATE	APPROVED
–	INITIAL RELEASE	AUG/28/2024	

Rosnol P/N	Length (mm)
PCN1K50-MP533A-EA-PCN1K50-3000A/18G	3000
PCN1K50-MP533A-EA-PCN1K50-XXXX/18G	Custom Length

Electrical Data

Impedance	50 ohm
Frequency	DC-18 GHz
Capacitance	87 pF/m (26.5 pF/ft)
Velocity of Signal Propagation	80%
Signal Delay	4.3 ns/m (1.31 ns/ft)
Insulation Resistance	≥ 1 x 10^8 MΩ/m
Shielding Effectiveness	>120 dB (DC -18.0 GHz)
Max. Operating Voltage	2.6 KVrms (at sea level)

Frequency	VSWR Max.	Insertion Loss Max.	Phase Stability vs Flexure[1]	Amplitude Stability vs Flexure[2]	Flex Life Cycle[3]
3 GHz	1.12	≤ 0.000546 (dB/mm) * L (mm) + 0.1 (dB)	± 3° Typ. ± 5.5° Max.	± 0.05 dB Typ. ± 0.10 dB Max.	≥ 10000
6 GHz	1.15	≤ 0.000787 (dB/mm) * L (mm) + 0.1 (dB)			
12.4 GHz	1.20	≤ 0.00116 (dB/mm) * L (mm) + 0.1 (dB)			
18 GHz	1.20	≤ 0.001422(dB/mm) * L (mm) + 0.1 (dB)			

[1] Per IEC 60966-1, section 8.6, method 1.

[2] Per IEC 60966-1, section 9.3.

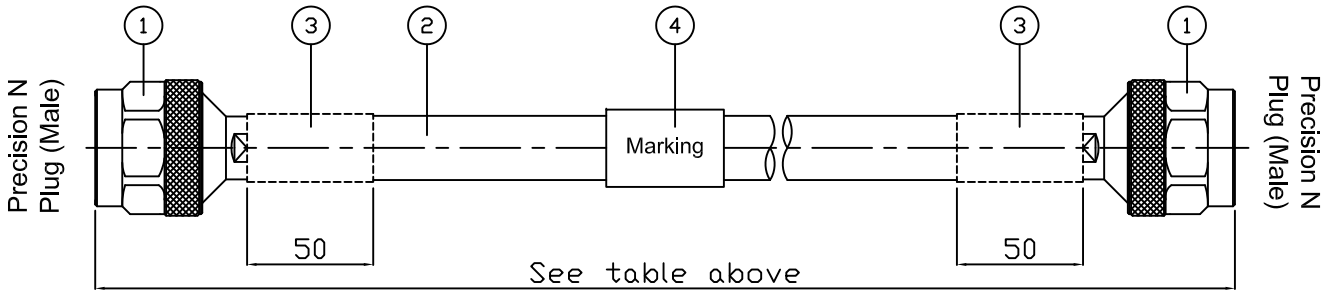
[3] Per IEC 60966-1, section 8.4.

Mechanical Data

Weight	N/A
Min. Bending Radius	Static 16 mm (.630 inch) Dynamic 25 mm (.984 inch)

Environmental Data

Operating Temperature	–40°C ~ +85°C
RoHS / REACH	Compliant



NOTES:
1) CONNECTORS ASSEMBLED PER MANUFACTURERS INSTRUCTIONS.
2) TEST AND MEASUREMENT 100%, DC-18 GHz VSWR X.XX, INSERTION LOSS: XXXX dB (SEE TABLE)
3) TEST REPORT SUPPLIED WITH ASSEMBLY.
4) MARKING DETAILS IF NOT SPECIAL MARKING TEXT:
   ROSNOL DC-18 GHz
   PCN1K50-MP533A-EA-PCN1K50-3000A/18G
   WWYY-SERIAL NUMBER

NO.	DESCRIPTION	PARTS NO.	QTY.	U/M
4	LABEL HEAT SHRINK TUBE	HST-W-D4-125C-G	1	EA
3	HEAT SHRINK TUBE	HST-B-D6.4-125C-G	2X 50	mm
2	CABLE	ROSNOL MP533A-EA Cable	3000	mm
1	Precision N Solder Clamp Plug	PCN1K50-MP533AEA/9XX	2	EA

DIMENSION ARE IN MM [INCH]

TOLERANCES

DECIMALS
.X ± 6.35 [.250"]
.XX ± 3.18 [.125"]
.XXX ± 1.52 [.060"]
DEGREES
X° ± 1°

CUSTOMER | REV: – | UNIT: mm [inch]

APPROVED | DATE

DRAWN | DATE

ROSNOL
RF/Microwave Technology
www.rosnol.com
info@rosnol.com
N-CAGE Code: SFKK0

TITLE
Precision N Plug (Male) to Precision N Plug (Male)
3 Meter Cable Assembly for MP533A-EA Cable

DRAWING NO.
PCN1K50-MP533A-EA-PCN1K50-3000A/18G