

## N M Solder for 1/4" Super Flexible Cable

P/N: AT3N1S-6J

### Product Feature:

- Connector Type : N Type
- Polarity : Standard
- Gender : Male/Plug
- Geometry : Straight
- Termination Style : Solder
- Cable : 1/4" Super Flexible
- Application: General Purpose/Telecom etc.



The **N-Type Male Solder Connector for 1/4" Super Flexible** cable is a high-performance 50-ohm interface specifically designed for low-loss telecommunications. Unlike standard crimp connectors, this solder-type version provides a **permanent, low-resistance electrical bond** at the center conductor, which is critical for minimizing Passive Intermodulation (PIM) and signal reflection in **5G infrastructure, satellite equipment, and broadcast systems.**

The body typically utilizes a clamp or compression nut for the outer conductor, ensuring a **watertight, IP68-rated seal** suitable for long-term outdoor deployment up to **6 GHz.**

### Electrical Specifications

Parameter	Value	Unit
Characteristic Impedance	50	$\Omega$
Frequency Range	DC ~ 6	GHz
VSWR	$\leq 1.15$	@DC-3 GHz
	$\leq 1.20$	@3-5 GHz
Insertion Loss	$\leq 0.05$	@DC-5 GHz
Insulation Resistance	$\geq 5000$	M $\Omega$
Dielectric Withstanding Voltage	$\geq 2.5$	kVrms
Inner Conductor Resistance	$\leq 1.0$	m $\Omega$
Outer Conductor Resistance	$\leq 0.25$	m $\Omega$
PIM	$\leq -155$	dBc@(2 $\times$ 43dBm)
RF Leakage	$\leq -85$	dB @3GHz



## Technical Data Sheet

Material & Plating		
Component	Material	Plating
Center Conductor	Phosphor/beryllium bronze	Silver
Outer Conductor/Body	Brass	Tri-Alloy
Back Nut	Brass	Nickel
Shield Clamp	Brass	Nickel
Dielectric	PTFE	-
Gasket	Silicone rubber	-

Mechanical & Environmental Specifications		
Parameter	Value	Unit
Durability (Matings)	≥ 500 min.	-
Coupling nut torque	25/30	Nm
Cable Type Compatibility	1/4" Super Flexible Cable	-
Operating Temperature	-40 ~ 85	°C
Ingress Protection (IP Rating)	IP67	-
Compliance	ROHS	-