Technical
Data Sheet

N F Solder for SM250 Cable

P/N: AT3N2S-6V

Product Feature:

- Connector Type : N Type
- Polarity : Standard
- Gender : Female/Jack
- Geometry : Straight
- Termination Style : Solder
- Cable : SM250
- Application: General Purpose/Telecom etc.

The **N Female Solder Connector** for **SM250 cable** is a high-precision RF interface engineered for exceptional signal integrity and low leakage. By utilizing a **solder-on attachment** for both the center pin and outer conductor, it establishes a permanent, high-conductivity bond ideal for frequencies up to **12 GHz**. This connector is widely used in **high-power amplifiers**, **radar systems**, and **precision test assemblies**. Its gold-plated contacts and robust construction ensure minimal loss and high phase stability for critical **aerospace and telecommunications applications**.

Electrical Specifications

Parameter	Value	Unit
Characteristic Impedance	50	Ω
Frequency Range	DC ~ 8	GHz
VSWR	≤ 1.15	@DC-4 GHz
	≤ 1.20	@3-6 GHz
Insertion Loss	≤ 0.05	@DC-5 GHz
Insulation Resistance	≥ 5000	MΩ
Dielectric Withstanding Voltage	≥ 2.5	kVrms
Inner Conductor Resistance	≤ 1.0	mΩ
Outer Conductor Resistance	≤ 0.25	mΩ
PIM	≤ -155	dBc@(2×43dBm)
RF Leakage	≤ -85	dB @3GHz

Ground floor, Plot No -20, (KH No-160/1,street No-3/2, samta Vihar, Mukandpur Extn., North West Delhi, Delhi-110042
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Material & Plating		
Component	**Material**	**Plating**
Center Conductor	Phosphor bronze	Silver
Outer Conductor/Body	Brass	Tri-Alloy
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	SM250 Cable	-
Operating Temperature	-40 ~ 85	°C
Ingress Protection (IP Rating)	IP67	-
Compliance	ROHS	-

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