

# V-BITE® Type N Connectors

50 Ohm Edge-Mount PCB



Bomar products, like V-Bite® Type N Connectors, are now sold under the Win™ brand from Winchester Interconnect™

## Product Description

V-Bite® Edge-Mount Type N PCB Connectors feature a unique and patented design that provides ease of assembly, outstanding RF performance, and superior mechanical strain relief.

V-Bite® Edge-Mount Type N connectors are available in 50 Ohm and can be used in a wide range of applications including Antennas, Telecommunications Equipment, and Test and Measurement.

V-Bite® Edge-Mount Type N PCB connectors snap into the printed circuit board and are held securely in position prior to soldering. Connector bodies are notched where they attach to the board, which helps to provide excellent strain relief and prevent fatigue to the solder joints during connector mating and unmating.

The edge-mount design utilizes a straight SMT contact for the RF signal that yields optimal performance versus a right-angle through-hole PCB connector.



V-Bite® Edge-Mount connectors feature a semi-circle shaped spring contact staked into a groove at the rear of the connector.



V-Bite® Edge-Mount connectors are fast and simple to install. Simply place the connector at a 45-degree angle to the PCB. Insert the PCB into the notched opening and push down onto the connector to seat it firmly in place.



Once installed, V-Bite® Edge-Mount connectors are ready to be soldered and do not require special fixtures to hold the connectors in true position.

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Interconnect.

*We Energize Innovation.*

## Specifications

<p><b>Electrical</b></p> <p><b>Impedance</b> 50 Ohms</p> <p><b>Frequency Range</b> 0 – 11 GHz</p> <p><b>Voltage</b> ≤ 1500 VRMS</p> <p><b>Dielectric Withstanding Voltage</b> 2500 VRMS at sea level</p> <p><b>VSWR</b> Straight: 1.15 Max Right Angle: 1.2 Max</p>	<p><b>Contact Resistance</b> Center Contact: ≤ 1 Milliohms Outer Contact: ≤ 0.2 Milliohms</p> <p><b>Insulation Resistance</b> 5000 Milliohms</p> <p><b>Insertion Loss</b> 0.2 dB Max</p>	<p><b>Mechanical</b></p> <p><b>Coupling Nut Retention</b> 100 lbs. Max</p> <p><b>Cable Retention</b> 60 lbs. Min</p> <p><b>Coupling Mating Torque</b> 6–10 in.-lbs.</p> <p><b>Durability</b> 500 Cycles Min</p>	<p><b>Material</b></p> <p><b>Body and Outer Contact</b> Brass Nickel Plated/ Gold</p> <p><b>Female Contact</b> Phosphor Bronze/ Gold Plated</p> <p><b>Insulator</b> Polyethylene or PTFE</p> <p><b>Environmental</b></p> <p><b>Temperature Range</b> –65° to +165° Celsius</p>
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## Part Numbers

Part Number	Description	PCB Thickness	Panel Thickness Maximum	Mounting Hardware
161V504E	Type N Edge-Mount Jack	0.062 in.	0.275 in.	
161V504EFT	Type N Edge-Mount Jack, Bulkhead	0.062 in.	0.275 in.	Included
161VUS504EFT	Type N Edge-Mount Jack, Bulkhead, Undershield	0.062 in.	0.275 in.	Included
161VU504EFTW	Type N Edge-Mount Jack, Bulkhead, with Gasket	0.062 in.	0.275 in.	Included
162V504E	Type N Edge-Mount Plug	0.062 in.	0.275 in.	

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