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 0hm 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.



Specifications

Electrical Impedance 50 Ohms Frequency Range 0 – 11 GHz

Voltage

≤ 1500 VRMS

Dielectric Withstanding Voltage 2500 VRMS at sea level

VSWR

Straight: 1.15 Max Right Angle: 1.2 Max Contact Resistance Center Contact:

≤ 1 Milliohms Outer Contact: ≤ 0.2 Milliohms Insulation Resistance

5000 Milliohms Insertion Loss

0.2 dB Max

Mechanical **Coupling Nut** Retention 100 lbs. Max

Cable Retention 60 lbs. Min

Coupling Mating Torque 6-10 in.-lbs. Durability 500 Cycles Min

Material

Body and Outer Contact Brass Nickel Plated/ Gold

Female Contact Phosphor Bronze/ Gold Plated

Insulator Polyethylene or PTFE

Environmental

Temperature Range -65° to +165° Celsius

Part Numbers

| Part Number | Description | PCB Thickness | Panel Thickness Maximum | Mounting Hardware |
|--------------|--|------------------|-------------------------------|----------------------|
| 161V504E | Type N Edge-Mount Jack | 0.062 in. | 0.275 in. | 6 6 6 |
| 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. | |

Win.®

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Winchester Interconnect: 161VUS504EFT