N-Male to N-Female Bulkhead 0-3 GHz Coaxial Lightning Protector
Model: AL-NMNFB

Applications

- Outdoor coaxial installations
- Protection of wireless devices
- Communication towers
- IEEE 802.11b/g wireless LAN applications

Features

- Reliable performance from DC ~ 3 GHz
- Bi-directional protection
- Protector will pass DC
- Replaceable gas tube element
- Available in 90V, 230V, 350V and 600V models

RoHS Compliant

Description

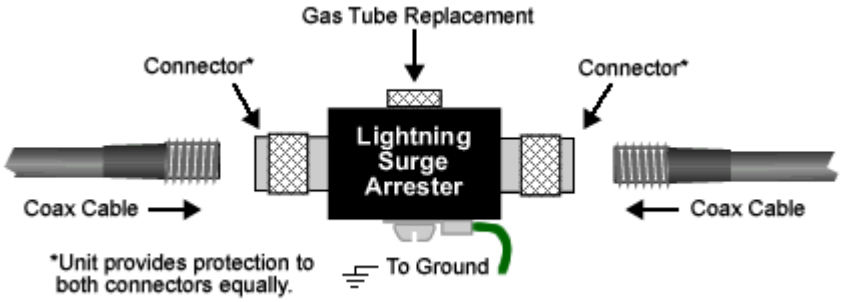
The AL-NMNFB is a gas discharge tube suppressor featuring wide-band operation up to 3 GHz. This unit features an N-Male to N-Female Bulkhead connector with a rubber "O"-ring seal for mounting through an enclosure wall or with the included aluminum mounting bracket.

Due to its low cost and superior RF performance, this unit is ideal for IEEE 802.11b and 802.11g Wireless LAN applications, as well as ISM, MMDS, Cellular, and PCS applications. Since this protector will pass DC, it is suitable for applications where DC is carried through the coax cable, such as remote amplifiers and LNAs.

Both connector ports of this unit are equally protected. This provides protection no matter which way it is installed. Either port can face the antenna and either port can face the equipment.

The unit's replaceable gas tube element, multi-strike capability, and fast response time make it suitable for a wide range of applications. A ground lug and terminal are supplied directly on the lightning protector housing, which provides superior grounding.

Replacement gas tube elements are available on the L-com web site.



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Specifications

Electrical Specifications

Models	AL-NMNFB-9	AL-NMNFB-2	AL-NMNFB-3	AL-NMNFB-6
Frequency Range	0 – 3 GHz			
VSWR	1:1.3 Max. (0 – 3 GHz)			
Insertion Loss	0.4 dB Max. (0 – 3 GHz)			
Impedance	50 Ohm			
Gas Tube Element: DC Breakdown Voltage Indicated	90V 20%	230V 20%	350V 20%	600V 20%
Gas Tube Impulse Breakdown Voltage	1000V 20%			
Gas Tube Insulation Resistance	10,000 MΩ			
Maximum Withstand Current	5 KA			

RF Power Rating

Models	Voltage Rating	DC ~ 30 MHz		30 ~ 500 MHz		500 MHz ~ 3 GHz	
		PEP[1]	CW[2]	PEP[1]	CW[2]	PEP[1]	CW[2]
AL-NMNFB-9	90 Volt	110W	55W	65W	32W	20W	10W
AL-NMNFB-2	230 Volt	280W	140W	110W	55W	40W	20W
AL-NMNFB-3	350 Volt	650W	325W	260W	130W	100W	50W
AL-NMNFB-6	600 Volt	2KW	1KW	800W	400W	320W	160W

Notes:
1 - Peak Envelope Power (PEP): The average power supplied to the antenna transmission line by a transmitter during one radio frequency cycle at the crest of the modulation envelope taken under normal operating conditions.

2 - Continuous Wave (CW): A wave of constant amplitude and constant frequency.

Mechanical Specifications – All Models

Connectors	N-Male to N-Female Bulkhead
Connector Body Material	Nickel Plated Brass
Body Material	Aluminum
Pin Material	Gold Plated Brass
O-Ring Material	Rubber
Bracket Material	Aluminum
Ground Lug	10 AWG Max.
Dimensions (L x H x W)	3.2 x 1.6 x 0.8 in. (82 x 40 x 20mm)
Max. Panel Thickness (Bulkhead Connector)	0.31 in. (7.93mm)
Weight	3.17 oz (89.8g)
RoHS Compliant	Yes