

AL-NFNFB-9 - N-Female to N-Female Bulkhead 0-3 GHz 90 V Lightning Protector

Features

- Reliable Performance from DC ~ 3 GHz
- Bi-Directional Protection
- Protector will pass DC
- Easily Replaced Gas Tube Element
- Multi-Strike Capability

Lightning Protector Model AL-NFNFB-9 is a gas discharge tube suppressor featuring wide-band operation up to 3 GHz. This unit features a 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.

Applications

- IEEE 802.11b and 802.11g Wireless LAN applications
- ISM
- MMDS
- Cellular applications
- PCS applications
- Specifications

Electrical Specifications							
Frequency Range		0 - 3 GHz					
Protector Complies With		IEC / IEEE Standard					
VSWR		1.30:1 Max (0 - 3 GHz)					
Insertion Loss		0.4 dB Max (0 - 3GHz)					
Impedance		50 Ohm					
Standard Gas Tube Element: DC Breakdown Voltage Indicated		90 V 20%					
Gas Tube Impulse Breakdown Voltage		1000 V 20%					
Gas Tube Insulation Resistance		10,000 MΩ					
Maximum Withstand Current		5 kA					
RF Power Rating							
Model Suffix	Voltage Rating	DC ~ 30 MHz		30 ~ 500MHz		500MHz ~ 3GHz	
		PEP ¹	CW ²	PEP ¹	CW ²	PEP ¹	CW ²
-9	90 Volt	110 W	55 W	65 W	32 W	20 W	10 W

Replacement gas tube for AL-NMNFB-9: LPX090

Mechanical Specifications	
Connectors Comply With	MIL-C-71A, 39012 Standard
Connectors Types	N-Female 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 in x 1.6 in x 0.8 in (82 mm x 40 mm x 20 mm)
Max. Panel Thickness (Bulkhead Connector)	0.312" (7.93 mm) Thick
Weight	3.17oz (89.8g)
Environmental Specifications	
Temperature Range	-67F to 185F (-55C to +85C)
Dust and Waterproof Rating	IEC 529 / IP65
Moisture Resistance	MIL-STD-202 Method 106D
Salt Fog	MIL-STD-202 101D/B
Temperature Shock	MIL-STD-202 107D/A-1
Vibration	MIL-STD-202 Method 204D/B
Shock	MIL-STD-202 Method 213B/A
RoHS Compliant	Yes

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.

