AL6-NMNFBW-9 - N-Male to N-Female Bulkhead 0-6 GHz 90 V Lightning Protector

Features

- Reliable Performance from DC ~ 6 GHz
- Bi-Directional Protection
- Protector will pass DC
- Easily Replaced Gas Tube Element
- Multi-Strike Capability

The AL6-NMNFBW-9 is a very high-performance gas discharge tube suppressor featuring wide-band operation up to 6 GHz. The unit features a bulkhead N-Female connector with a rubber "O"-ring seal for mounting through an enclosure wall or using the optional stainless steel mounting bracket.

Due to its superior RF performance this unit is ideal for IEEE 802.11a and other 5.2 - 5.8 GHz ISM and UNII applications, as well as 3.5 GHz WLL 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 LNA's.

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 is provided directly on the lightning protector housing, which provides superior grounding.

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 802.11a, 802.11b and 802.11g Wireless LAN applications
- ISM
- MMDS
- Cellular applications
- PCS applications

Specifications

Electrical Specifications	
Frequency Range	0 - 6 GHz
Protector Complies With	IEC / IEEE Standard
VSWR	1.20:1 Max (0 - 6 GHz)
Insertion Loss	0.6 dB Max (0 – 6 GHz)
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

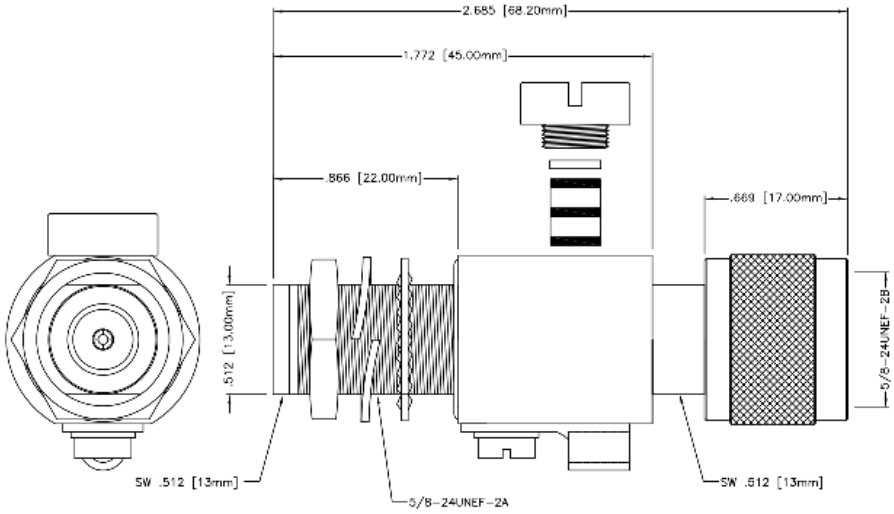
Replacement gas tube for AL6-NMNFBW-9: LPX090-6

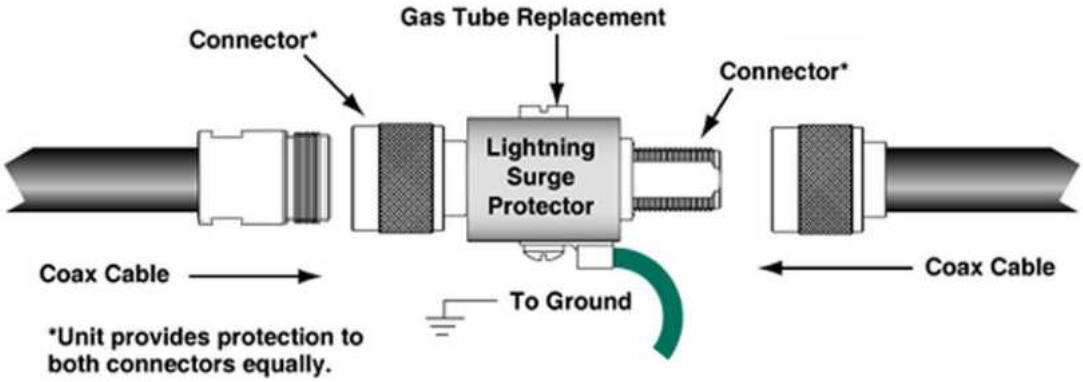
Mechanical Specifications	
Connectors Comply With	MIL-C-71A, 39012 Standard
Connectors Types	N-Male to N-Female Bulkhead
Connector Body Material	Nickel Plated Brass
Body Material	Aluminum
Pin Material	Gold Plated Brass
O-Ring Material	Rubber
Bracket Material	Aluminum
Ground Lug	10 AWG Max.
Max. Panel Thickness (Bulkhead Connector)	0.312" (7.93 mm) Thick
Dimensions (L x H x W)	2.6 in x 1.2 in x 0.9 in (68 mm x 31 mm x 23 mm)
Weight	0.25 lbs. (110 g)
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.


2.685 [68.20mm]
1.772 [45.00mm]
.866 [22.00mm]
.669 [17.00mm]
.512 [13.00mm]
5/8-24UNEF-2B
SW .512 [13mm]
5/8-24UNEF-2A
SW .512 [13mm]


Gas Tube Replacement
Connector*
Connector*
Lightning Surge Protector
Coax Cable
Coax Cable
To Ground
*Unit provides protection to both connectors equally.