ISO 9001 Certified

Times Protect®

LP-HBX-N Series

- *DC Blocked for Maximum Surge Protection*
- *Multi-Strike Capability*
- *Broadband Performance from 100MHz up to 700MHz*
- *Exceptional RF Characteristics*
- *High Power Design for Single & Multi Channel Applications*





Lightning and Surge Protection for The 21st Century™

The **Times Protect®** LP-HBX-N series high performance surge arrestor series addresses applications in the 100MHz-700MHz spectrum. Our unique DC blocking technology employed in this design provides optimum isolation of the antenna port from the protected equipment port for maximum surge protection. LP-HBX-N series surge protectors have exceptional RF performance and are constructed from the highest quality materials for unsurpassed durability and longevity. These units meet and surpass all applicable industry standards.

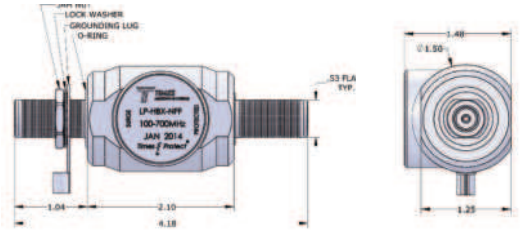
The LP-HBX-N series product family is available with N connector configurations to satisfy various installation requirements.

LP-HBX-N Series:

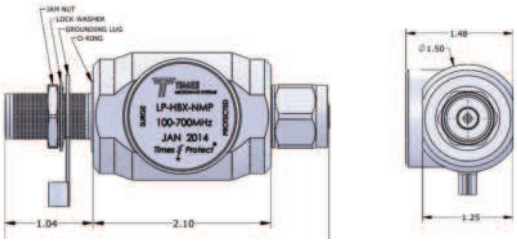
- LP-HBX-NFF
  N Female connectors on surge and protected sides
- LP-HBX-NMP
  N Male connector on protected side with N Female connector on surge side
- LP-HBX-NMS
  N Male connector on surge side with N Female connector on protected side

TIMES MICROWAVE SYSTEMS
An Amphenol Company

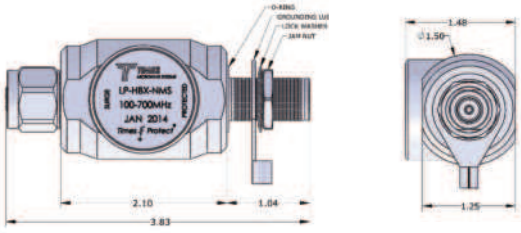
Times-Protect®



• LP-HBX-NFF
100-700MHz DC Blocked N Type F/F



• LP-HBX-NMP
100-700MHz DC Blocked N Type M on Protected



• LP-HBX-NMS
100-700MHz DC Blocked N Type M on Surge

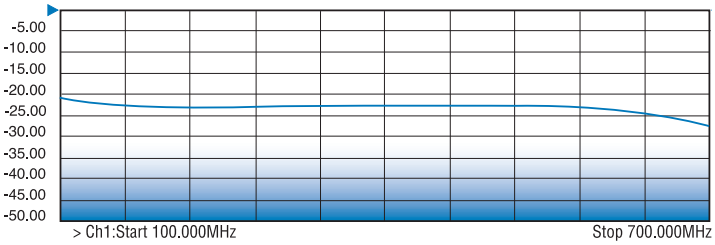
Electrical Specifications	
Impedance	50 Ω
Frequency Range	100-700 MHz
VSWR/Return Loss	<1.15:1 / <-23dB
Insertion Loss	< 0.1dB
Impulse Discharge Current	20KA multiple (8x20µs wave-form)
Residual Pulse Voltage	<5V@6kV/3kA (8x20µs wave-form)
Energy Throughput Rating	<1.4µJ (6kV/3kA 1.2x50/8x20µs wave-form)
Power Handling	750 Watts
Protection Circuit	DC Blocked

Mechanical / Environmental Specifications	
Temp Range Storage/Operating	-40°C - +85°C / -40°C - +50°C
Weatherization	IP 65
Thermal Shock	US MIL-STD 202, Meth.107,Cond.B
Vibration	US MIL-STD 202, Meth.204,Cond.B
Shock	US MIL-STD 202, Meth.213,Cond.I
RoHS Compliant	Yes
Mating Life Cycle	> 500
Recommended Coupling Nut Torque	7 to 10 in-lb
Unit Weight	0.2kg/pc / 0.4lb

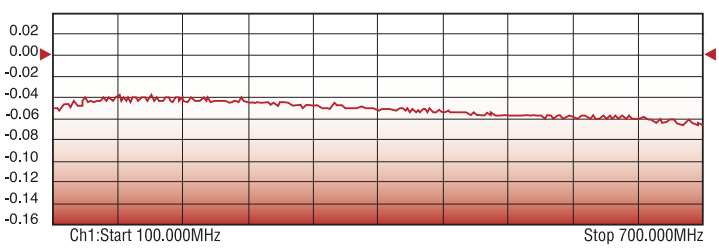
Material Specifications		
Component	Material	Plating
Body	Aluminum	White Bronze
Inner Conductor Male	Brass	Silver
Inner Conductor Female	Phosphor Bronze	Silver
Coupling Nut	Brass	White Bronze
Insulator	PTFE	--
O-Ring	Silicone Rubber	--

*All dimensions shown in inches

S11 **TYPICAL RETURN LOSS**



S21 **TYPICAL INSERTION LOSS**



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