



# Type N F/F In/Out Bulkhead RF Coaxial Surge Protector DC - 3GHz DC Pass 40W IP67 40kA Gas Discharge Tube BiDirect

## RF Surge Protectors Technical Data Sheet

**LCSP1039**

### Features

- Surge current of 40kA
- Max Power 40W(RMS)
- Frequency range from DC to 3GHz
- N-type female connectors
- Waterproof IP67 rated
- DC Pass
- VSWR <1.2
- CE & RoHS compliant
- Bi-Directional

### Applications

- WiFi
- GPS
- Land mobile radio

### Description

RF surge protector (also known as lightning arrester) LCSP1039 from L-COM utilizing a proprietary gas tube surge protection technology protects critical hardware from lightening events while maintaining the RF performance. This RF surge protector component is manufactured in a coaxial in-line design with wide operating frequency range. All L-COM RF surge protector products are available in stock with same day shipping.

### Electrical Specifications

Surge Protector Type  
DC Handling

Gas Discharge Tube  
DC Pass

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
VSWR			1.2:1	
Return Loss			26	dB
Insertion Loss			0.26	dB
Input Power, CW 40W @ 30MHz			40	Watts
Surge Current IEC 61000-4-5 8/20µs WAVEFORM			40	kAmps
Turn On Voltage		150 ±20 %		Volts
Throughput Energy 8/20µsec 4kA SURGE PULSE			500	µJ

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Type N F/F In/Out Bulkhead RF Coaxial Surge Protector DC - 3GHz DC Pass 40W IP67 40kA Gas Discharge Tube BiDirect LCSP1039](#)



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#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 1	1 to 3				GHz
VSWR, Typ	1.1:1	1.2:1				
Insertion Loss, Max	0.1	0.25				dB

#### Mechanical Specifications

##### Configuration

Input Connector  
Output Connector

N Female  
N Female

#### Environmental Specifications

##### Temperature

Operating Range

-55 to 85 deg C

Ingress Protection (IP) Rating

IP 67

#### Compliance Certifications (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

Our portfolio includes cable assemblies, connectors, adapters and custom products, as well as their wireless product line which includes antennas, RF amplifiers, coaxial lightning and surge protectors, and NEMA rated enclosures.

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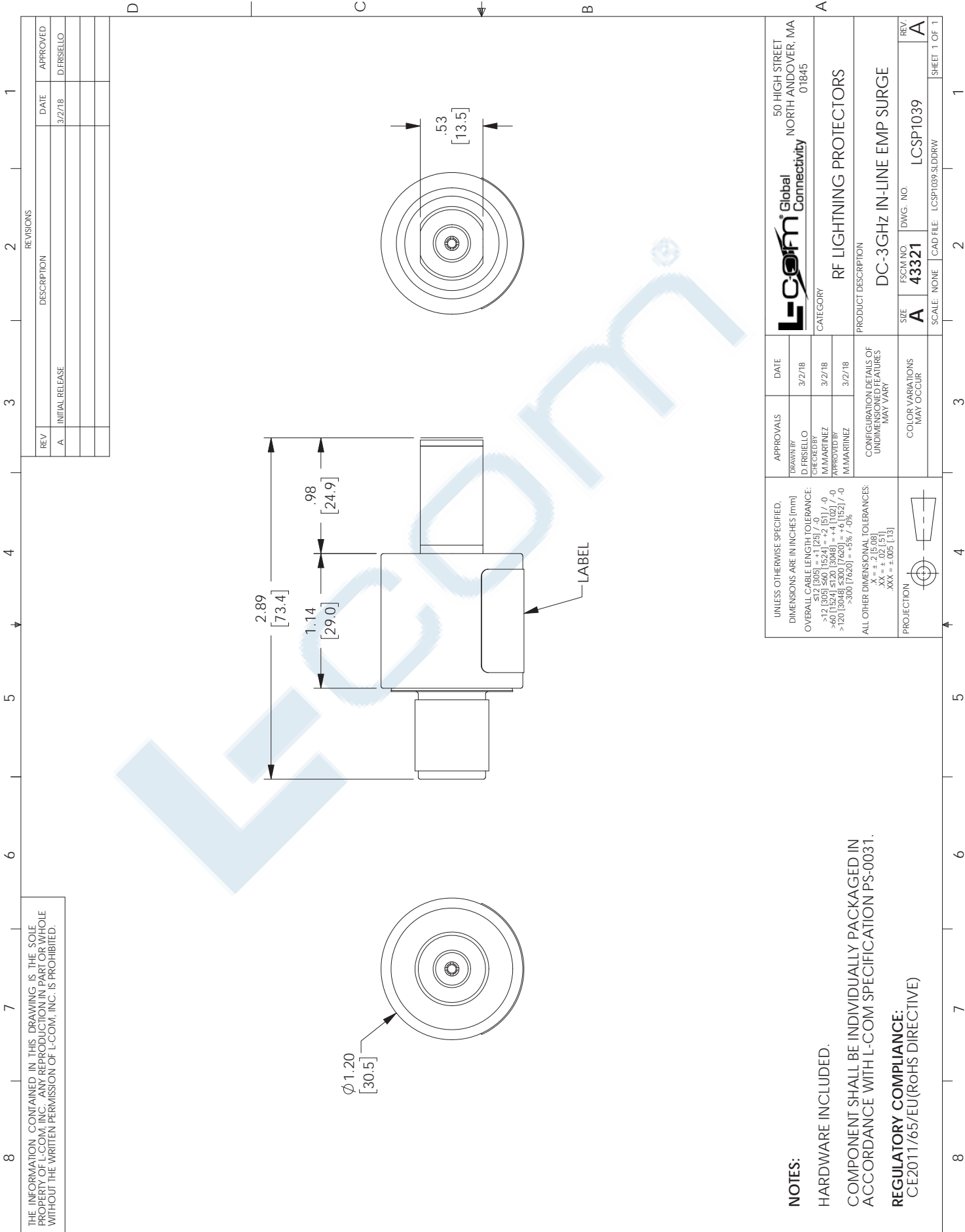
URL:

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume any liability arising out of the use of any part or documentation.

# LCSP1039 CAD Drawing

Type N F/F In/Out Bulkhead RF Coaxial Surge Protector DC - 3GHz

DC Pass 40W IP67 40kA Gas Discharge Tube BiDirect



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UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES [mm]		APPROVALS	DATE	L-com Global Connectivity		50 HIGH STREET
OVERBALL CABLE LENGTH TOLERANCE:		DRAWN BY	3/2/18	NORTH ANDOVER, MA		01845
≤12 [305] = +1 [25] / -0		D. FRISIELLO		RF LIGHTNING PROTECTORS		
>12 [305] ≤60 [1524] = +2 [51] / -0		CHECKED BY	3/2/18	DC-3GHz IN-LINE EMP SURGE		
>60 [1524] ≤120 [3048] = +4 [102] / -0		M. MARINEZ		PRODUCT DESCRIPTION		
>120 [3048] ≤300 [7620] = +6 [152] / -0		APPROVED BY	3/2/18	RF LIGHTNING PROTECTORS		
>300 [7620] = -5% / -0%		M. MARINEZ		DC-3GHz IN-LINE EMP SURGE		
ALL OTHER DIMENSIONAL TOLERANCES:		CONFIGURATION DETAILS OF UNDIMENSIONED FEATURES MAY VARY		SIZE		REV.
X = ±.001 [0.025]		COLOR VARIATIONS MAY OCCUR		A		A
Y = ±.001 [0.025]				FSCM NO		DWG. NO.
XXX = ±.005 [0.127]				43321		LCSP1039
PROJECTION				SCALE: NONE		CAD FILE: LCSP1039.SLDTRW

**NOTES:**  
 HARDWARE INCLUDED.  
 COMPONENT SHALL BE INDIVIDUALLY PACKAGED IN ACCORDANCE WITH L-COM SPECIFICATION PS-0031.  
**REGULATORY COMPLIANCE:**  
 CE2011/65/EU (RoHS DIRECTIVE)