Gas-tube Surge User Manual

Product Overview

Antenna feeder switch series lightning protection products are mainly used in radio frequency signal system to protect communication equipment signal lines from lightning electromagnetic pulse, induced overvoltage and switching overvoltage. They are widely used in wireless coverage, communication base station, cable TV, satellite TV, GPS and other fields. This series of products have the advantages of wide frequency range, low insertion loss and small standing wave, which can provide good lightning protection effect without affecting the normal communication of equipments.

Technical Parameter

Model	WL-A25S70F
Electrical Parameter	
Working frequency	0-3.0GHz
Max. continuous operating voltage Uc	70V
DC breakdown voltage	90V
Max. discharge current Imax	10kA
Limiting voltage(8/20μs)	700V
Insertion loss	0.5dB
VSWR	1.5
Interface form	SMA- F/M
Mechanical characteristics	
Dimension	49(L)×26(W)×28.5(H)mm
Weight per unit	99.5g
IP Code	IP20
Working conditions	Temperature: -40 to +80 ℃ Relative humidity: ≤ 95%
Standards compliance	IEC1000-4-5, RoHS

Installation Conditions

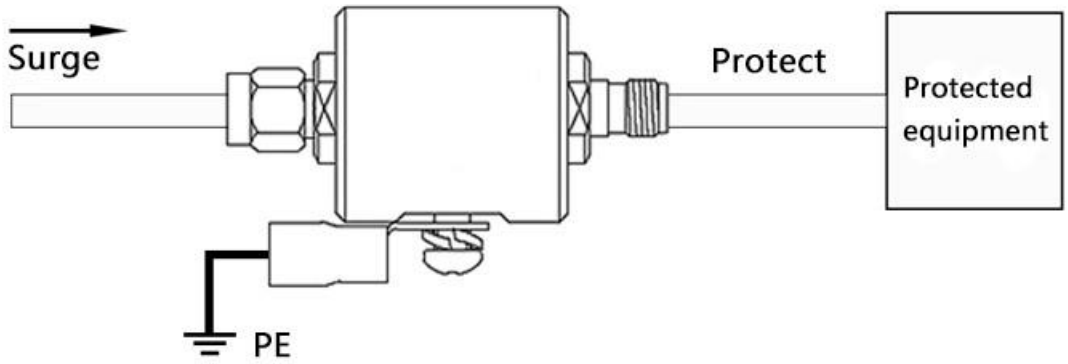
- Indoor or in waterproof case
- Avoid vibrate environment
- Ensure that the RF signal frequency and working voltage match with the surge
- Ensure that the surge can be reliably grounded, and the power frequency grounding resistance is under 10Ω

Installation Preparation

Tools: cross screw driver, slotted screw driver, wire stripper

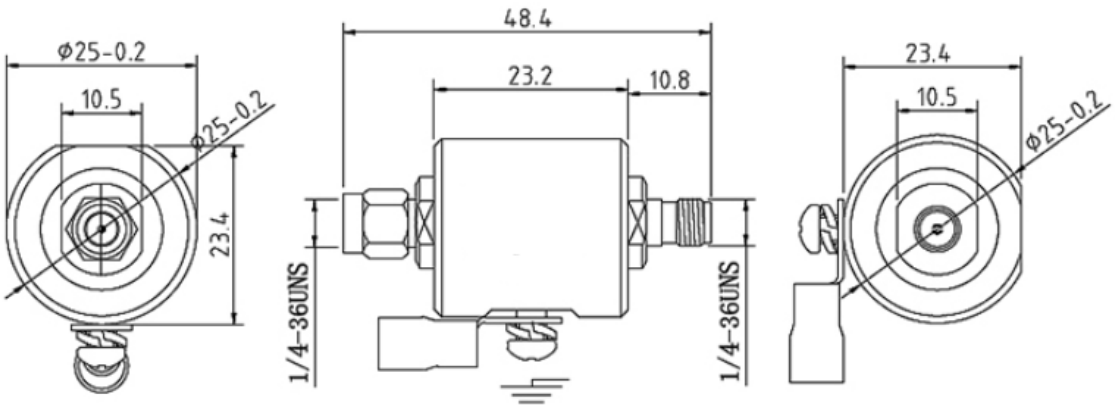
Materials	Specs	Quantity	Purpose
Feeder	The length depends on the actual situation	1pc	To connect the surge with the protected equipment
PE cable	≥2.5mm^2	1pc	Grounding

Installation Diagram



1. Place the surge horizontally (regardless of direction)
2. Connect the surge and the RF input port of the protected equipment with RF cable
3. Connect the surge and outdoor device/component with RF cable
4. Ground the ground wire

Dimensions



Common Faults

Faults	Possible Causes	Solutions
After installation, the signal is seriously attenuated or even blocked	The transmission performance of the surge is not good	Replace a new surge
	The transmission distance is out of max. range	Ensure the RF cables are within the standard range
	Characteristic impedance mismatch between surge and cable	The impedance of the surge is 50Ω
After grounding, no signal. And after ground wire disconnected, it returns to normal	Excessive fluctuation of ground voltage	Ground network transformation

It keeps heating after installation	Excessive RF signal power	Replace a new surge
After running for a period of time, no signal. And after surge removed, signal returns to normal	Surge is damaged	Replace a new surge