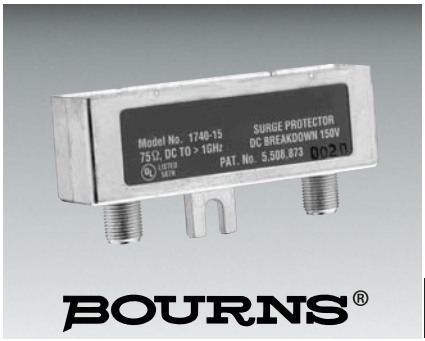


BOURNS®

Features

- Protects subscribers and equipment from destructive power crosses and lightning surges
- Compact size fits subscriber network interface devices
- Reduces frequency of service calls
- Increases reliability of network operation
- Reduces cost of network maintenance
- (UL) Listed per 497 C
- Patent # 5,508,873 (U.S.); #2,169,604 (Canada)

1740 Series – Coaxial Surge Protector

75 Ohm Powered & Unpowered Coax DC to >1 GHz

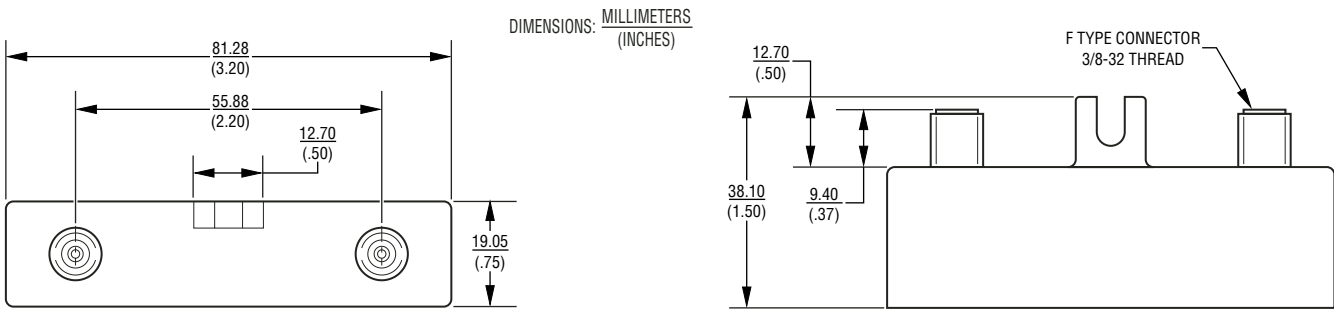
The Bourns 1740 Series of Primary Broadband Coaxial Surge Protectors is designed for Network and other high frequency applications. The 1740 Series provides protection against surges on 75 ohm coax subscriber drops and has a fail-short mechanism in the event of dangerous power-crosses. The protector will pass bi-directional signals over the bandwidth from DC to in excess of 1 Ghz. Its cast-metal housing and environmentally sealed design will withstand the toughest Outside Plant Applications.

Characteristics

Min. Band Width/Frequency Characteristics	**DC to 1.0 GHz**	**DC to 1.25 GHz**
Connectors, Input & Output	F-Type (female)	F-Type (female)
Characteristic Impedance	75 Ω	75 Ω
Transmission/Insertion Loss (Max.)	0.15 dB	0.45 dB
Return Loss (Max.)	20 dB	13 dB
VSWR (Max.)	1:1.22	1:1.57
Min Fail-Short, Power Cross & Sustained 60 Hz Current Capability		
1000 Vrms Open-Circuit Voltage, 25 °C	30 Arms Line to Ground	15 minutes
	60 Arms Line to Ground	5 seconds
	120 Arms Line to Ground	5 seconds
	350 Arms Line to Ground	200 mseconds
Capacitance	1 MHz, 1 Vrms, 0 Vdc	<10 pF
Insulation Resistance	100 V	$>10^8$ Ω
Operating Temperature	-40 °C to 65 °C (-40 °F to 149 °F)	-40 °C to 65 °C (-40 °F to 149 °F)
Storage Temperature	-55 °C to 85 °C (-67 °F to 185 °F)	-55 °C to 85 °C (-67 °F to 185 °F)

Model No.	SURGE PROTECTION CHARACTERISTICS							IMPULSE RESET
	DC Breakdown @ 100 V/Sec (Volts)	Typical Impulse Breakdown @ 100 V/μs (Volts)	Service Life, Lightning		Service Life, AC, 60 Hz			52.5Vdc @ 260 mA 135 Vdc @ 200 mA (Millisec)
			100 A 10/1000 μs (Operations)	5 kA 8/20 μs (Operations)	20 kA 8/20 μs (Operations)	5 A 1000 Vac 1 sec (Operations)	10 A 1000 Vac 1 sec (Operations)	
1740-15	150 ±20 %	350	>1000	>10	>1	20	10	<150
1740-23	230 ±20 %	450	>1000	>10	>1	20	10	<150
1740-35	350 ±20 %	650	>1000	>10	>1	20	10	<150

Product Dimensions



REV. L

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.



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