



SP6

Coaxial Surge Protectors

COAXIAL SURGE PROTECTORS

DC to 6 GHz Operation

SP6 surge protectors are an integral part of any antenna installation involving the protection of sensitive equipment from surges caused by lightning. The ultra fast discharge design gives quick response to power surges and dumps the excess power safely to ground. Grounding is accomplished via a ground lug terminal or N bulkhead connector. The units have the ability to withstand multiple lightning strikes. The SP6 passes DC voltage so it is also suitable for those systems which pass DC power through the coax such as remote amplifiers. Construction is all plated brass to resist corrosion.

FEATURES

- Ultra fast gas discharge < 1KV / usec
- 0.2 dB @ 2.4 GHz, 0.4 dB @ 5 GHz max insertion loss
- VSWR better than 1.4:1
- Rugged, lightweight and IPx7 waterproof
- Bulkhead mount N female connector

APPLICATIONS

- Lightning protection for antenna systems
- 900 MHz, 2.4 GHz @ 5 GHz WLAN systems
- WiMAX

PARAMETER	MIN	TYP	MAX	UNITS
Frequency Range	DC	2400	6000	MHz
Insertion Loss	.1	.2	.4	dB
VSWR	1.1 : 1	1.2 : 1	1.4 : 1	
DC Breakdown Voltage		230		V
Impulse Breakdown Voltage (1 KV/uS MAX)		700		V
Impulse Wave Discharge (5 times)		10000		A
Impedance		50		OHM
Insulation Resistance (100 V)	50			
Input Power			100	W
Operating Temperature	-40		+85	°C
Weight		4.5 (130)		oz (g)
Dimensions (incl connectors)	2.7 x 1.2 x 0.9 (68 x 31 x 23)			in. (mm)
Ingress Protection	IPx7			

SYSTEM ORDERING

SP6-230-BFF DC to 6 GHz, bulkhead N female to N female, 230 V surge protector

SP6-230-BFM DC to 6 GHz, bulkhead N female to N male, 230 V surge protector

TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

te.com

TE, TE Connectivity, TE connectivity (logo), and EVERY CONNECTION COUNTS are trademarks owned or licensed by the TE Connectivity plc family of companies. Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this document, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, complete, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES REGARDING THE INFORMATION CONTAINED HEREIN, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event will TE be liable for any direct, indirect, incidental, special or consequential damages arising from or related to recipient's use of the information. It is the sole responsibility of recipient of this information to verify the results of this information using their engineering and product environment. Recipient assumes any and all risks associated with the use of the information. Antenna performance may vary. TE is a component manufacturer, and customer and/or end-user is responsible for all end-use compliance and regulatory requirements.

©2025 TE Connectivity. All Rights Reserved.

05/25 Original