

OTOWA SPD for Coaxial Connection

Otowa High Frequency Surge Protective Device for coaxial cable are generally applicable for various signal lines. They are designed and tested to manage the transient overvoltages caused by lightning strikes on coaxial cables even sometimes connected directly to outside areas. The coaxial product lines cover the TV and CCTV systems and others with C2 and D1 impulse durability. They are available with N, BNC, F connections.



CS-BNCJ75-...



CS-FIJ75-T230HD

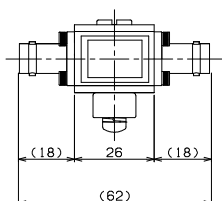
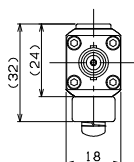


CS-NPJ50-...

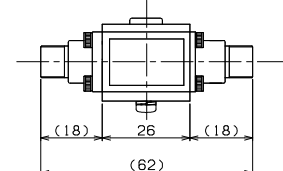
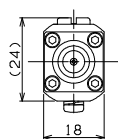
*SPD Class (Category)C2, D1 lightning durability
 *Superior high frequency performance
 *Protect surges from aerial antenna of Digital TV, BS,
 CS broadcasting line

Type	CS-BNCJJ75-T90FG2	CS-BNCJJ75-T230FG2	CS-FJJ75-T230HD	CS-NPJ50-T230LT	CS-NPJ50-T350LT	CS-NPJ50-800
SPD Class (Category)			C2, D1			
Connector type	BNC		F	N		
	socket / socket		socket / socket	socket / plug		
Bandwidth	100kHz ~ 3.0GHz	100kHz ~ 3.0GHz	0 ~ 3.3GHz	0 ~ 3.0GHz	0 ~ 3.0GHz	0 ~ 2.0GHz
Impedance	75Ω	75Ω	75Ω	50Ω	50Ω	50Ω
Insertion loss	100kHz ~ 1.5GHz : ≤0.2 dB 1.5GHz ~ 2.2GHz : ≤0.4 dB 2.2GHz ~ 3.0GHz : ≤0.6 dB		DC ~ 2.15GHz : ≤ 0.3 dB 2.15GHz ~ 2.6GHz : ≤0.4 dB 2.6GHz ~ 3.3GHz : ≤0.8 dB	0 ~ 2.0GHz : ≤ 0.2 dB	0 ~ 3.0GHz : ≤ 0.2 dB	0 ~ 1.0GHz : ≤ 0.1 dB 1.0 ~ 2.0GHz : ≤ 0.2 dB
Max. Continuous operating voltage (Uc)	60 Vdc	140 Vdc	80Vdc	250 Vdc	250 Vdc	430 Vdc
Voltage protection level (8/20 μs : Up)	L-L : ≤630V L-E : ≤700V	L-L : ≤650V L-E : ≤800V	≤ 650 V	≤ 800 V	≤ 1200 V	≤ 1500 V
C2 Nominal discharge current (8/20 μs)	20kA		15kA	20kA		
D1 Lightning impulse current (10/350 μs)	2.5kA		2.5kA	2.5kA		
Maximum allowable power	50W	80W	80W	50W	100W	200W
Rated current	—	—	2A (40Vdc)	—	—	—
Overstressed fault Mode	mode 2	mode 2	mode 2	mode 2	mode 2	mode 2
Voltage Standing Wave Ratio (VSWR)	100kHz ~ 1.5GHz : ≤1.1 1.5GHz ~ 2.2GHz : ≤1.2 2.2GHz ~ 3.0GHz : ≤1.4		0 ~ 2.15GHz : ≤1.3 2.15GHz ~ 2.60GHz : ≤1.4 2.60GHz ~ 3.3GHz : ≤2.0	0 ~ 2.0GHz : ≤1.2	0 ~ 3.0GHz : ≤1.2	0 ~ 1.0GHz : ≤1.1 1.0 ~ 2.0GHz : ≤1.2
Shield earthing	indirectly via an integrated spark gap		Directly	Directly		
Operating temperature range (TU)	-20 ° C ~ +80 ° C					
Weight	approx. 90g		approx. 85g	approx. 110g		
Degree of protection (if lines are connected)	IP 20			IP65 Only when the connector part (socket / plug) has been given an appropriate drip-proof treatment		IP 20
Location category	Indoor					
Test standards	IEC 61643-21					

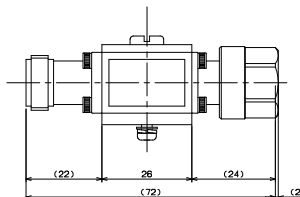
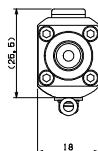
Dimension drawing



CS-BNCJ75-...FG

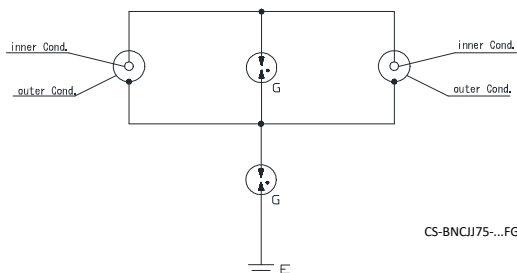


CS-FIJ75-T230HD

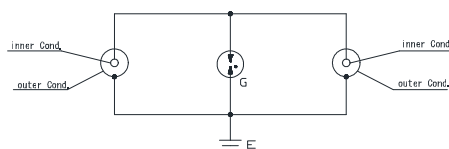


CS-NPJ50-...

Circuit diagram



CS-BNCJ75-...FG

CS-FIJ75-T230HD
CS-NPJ50-...

Other information



OTOWA web site



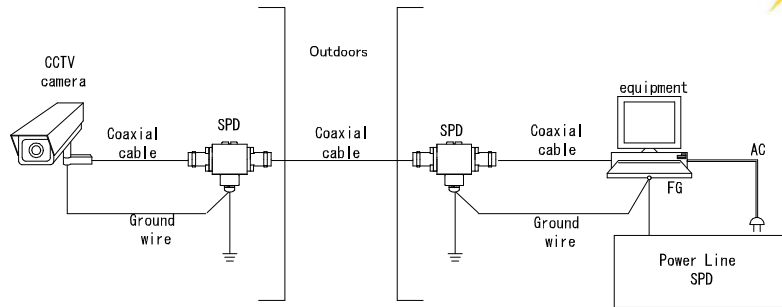
Instruction manual

OTOWA SPD for Coaxial Connection

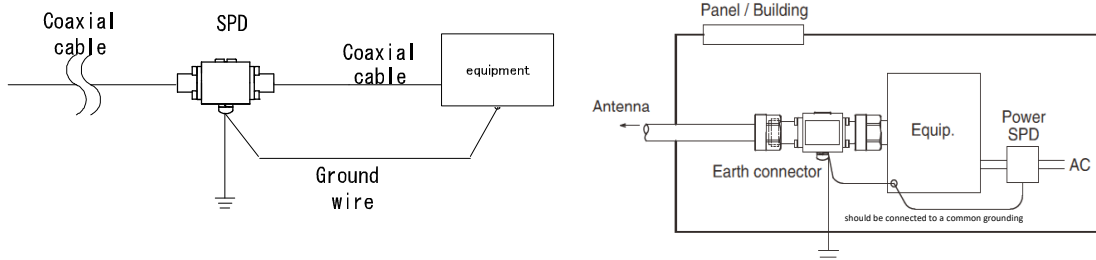


Connection

When shield is not grounded indirectly via an integrated spark gap



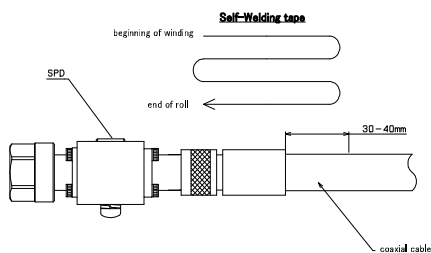
Shield earthing
When the shield has the same potential as the ground



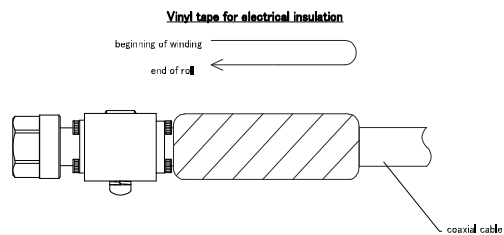
Drip-Proof treatment method

CS-NPJ50-T230LT, CS-NPJ50-T350LT

1. cleaning
Remove oil, water droplets, dust, etc. from the area to be taped.
2. Winding of Self-Welding tape
From the base of the connector on the SPD side, while stretching the tape so that the width becomes about 3/4, wind the tape at least twice toward the cable side so that about half of the tape width overlaps and no gap is formed.
Wrap the self-fusing tape around the coaxial cable 30 ~ 40 mm.



3. Winding of weatherproof vinyl tape for electrical insulation
A weather-resistant vinyl tape for electrical insulation is wound round and round one or more times from the self-fusion tape similarly without clearance. The winding direction is opposite to the direction of the self-fusion tape. Always use weather-resistant vinyl tape.



Manufacturer



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<https://www.otowadenki.com>

Agency