

Modular SPD for Single Pair

SPT-DC Series

D1•C1•C2•C3

- IEC/EN Category: D1/C1/C2/C3
- Mode of Protection: Longitudinal, Transverse
- Coarse Protection: 3 Terminal GDT
- Voltages: 5, 12, 15, 24, 30*, 48, 60, 110 VDC
- Frequency Range: 30 MHz
- Surge Discharge Ratings: I_n : 10 kA, I_{max} : 20 kA, I_{imp} : 2.5 kA
- Series Load Current: 1 A
- Enclosure: DIN 43880 2/3 TE, DIN Rail Mount
- Terminals: Stranded to 4 mm²
- Housing: Modular Design
- Compliance: IEC/EN 61643-21
UL 497B 4th Edition



Dimensions

Basic circuit diagram

Technical Data

SPT-DC Series

	5	12	15	24	30*	48	60	110	
Electrical									
Lines Protected	1								
Nominal Operating Voltage (DC)	U_n	5V	12 V	15 V	24 V	30 V	48 V	60 V	110 V
Maximum Continuous Operating Voltage (DC)	U_c	6V	15 V	18 V	28 V	33 V	52 V	64 V	170 V
Rated Load Current at 25°C	I_L	1A							
C2 Nominal Discharge Current (8/20 μ s)	I_n	10kA							
Maximum Discharge Current (8/20 μ s)	I_{max}	20kA							
D1 Impulse Current (10/350 μ s)	I_{imp}	2.5kA							
Residual Voltage at 5 kA (8/20 μ s)	U_{res}	<22V	<42 V	<48 V	<70 V	<80 V	<140 V	<160 V	<450 V
Rated Spark Overvoltage	(Line-Ground)	7-10V	16-21 V	21-25 V	31-37 V	36-44 V	57-69 V	68-84 V	184-264 V
	(Line-Line)	7-10V	16-21 V	21-25 V	31-37 V	36-44 V	57-69 V	68-84 V	184-264 V
Response Time Overvoltage Protection	t_A	< 1 ns							
Thermal Protection		Yes							
Cut-off Frequency	f_G	30MHz							
Mechanical									
Temperature Range		-40 °F to +176 °F [-40 °C to +80 °C]							
Terminal Cross Section Multi-strand (max.)		12 AWG [4 mm ² , 2.5 mm ² Q Version]							
Degree of Protection IEC/EN 60529		IP 20 (built-in)							
Mounting IEC/EN 60715		35 mm DIN Rail							
Order Information									
Order Code		5	12	15	24	30*	48	60	110
SPT-DC-xxx		9086.33	9086.34	9086.35	9086.36	9082.80	9086.37	9086.38	9086.39
SPT-DC-xxxM (module)		9086.40	9086.41	9086.42	9086.43	9082.81	9086.44	9086.45	9086.46