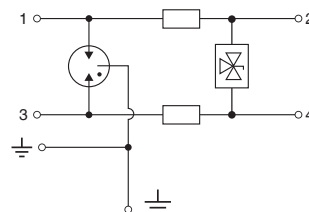


# DATA SHEET

## Modular SPD for Two Pair RayDat SPI-2 Series D1 • C1 • C2 • C3



IEC/EN Category: D1/C1/C2/C3  
Surge Discharge Ratings:  $I_n$ : 10 kA,  $I_{max}$ : 20 kA,  $I_{imp}$ : 2.5 kA  
Voltages: 30 V DC  
Frequency Range: 30 MHz, 10 MHz  
Housing: Modular Design  
Compliance: IEC/EN 61643-21  
Configuration:



### Technical Data

#### SPI-2 Series

30

#### Electrical

Lines Protected		1 (2 Conductors)
Nominal Operating Voltage (DC)	$U_n$	30V
Maximum Continuous Operating Voltage (DC)	$U_c$	33V
Rated Load Current at 25°C	$I_L$	1 A
C2 Nominal Discharge Current (8/20µs)	$I_n$	10 kA
Maximum Discharge Current (8/20µs)	$I_{max}$	20 kA
D1 Impulse Current (10/350µs)	$I_{imp}$	2.5 kA
Total Impulse Current (10/350µs)	$I_{imp}$	5 kA
Residual Voltage at 5 kA (8/20µs)	(Line-Line) $U_{res}$	< 80V
Rated Spark Overvoltage	(Line-Ground)	184-276V
	(Line-Line)	36-44V
Response Time Overvoltage Protection	(Line-Line) $t_A$	< 1 ns
	(Line-Ground)	< 100ns
Insulation Resistance of the Protection	(Line-Ground) $R_{iso}$	> 1 GΩ/100V
	(Line-Line)	≥ 33 MΩ
Serial Resistance per Path	$R$	1.6-2.0Ω
Transverse Capacitance	(Line-Line) $C$	50 pF
	(Line-Ground)	5 pF
Cut-off Frequency	$f_G$	30 MHz

#### Mechanical

Temperature Range	-40 °F to +176 °F [-40 °C to +80 °C]
Terminal Cross Section Multi-strand (max.)	12 AWG
	4 mm², 2.5 mm² Q Version
Terminal Screw Torque	4.5 lbf-in [0.5 Nm]
Degree of Protection IEC/EN 60529	IP 20 (built-in)
Housing Material	Thermoplastic; Grey; Extinguishing Degree V-0
Mounting IEC/EN 60715	35mm DIN Rail

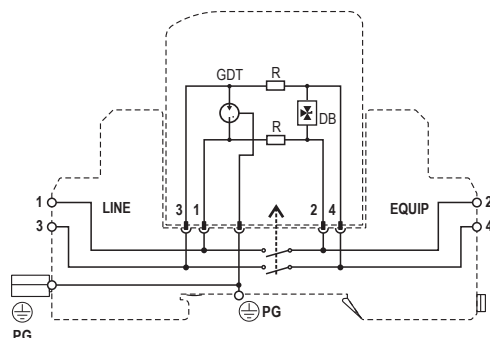
#### Order Information

Order Code	30
SPI-2-xxx	7085.67
SPI-2-xxxM (module)	7085.68

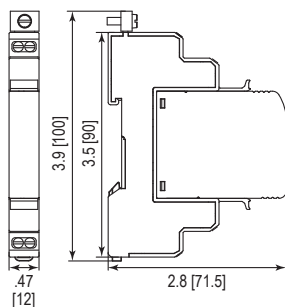
## RayDat SPI-2 Series

### Legend

DB Diode Block  
GDT Gas Discharge Tube  
PG Protective Grounding  
R Resistor



## Dimensions & Packaging

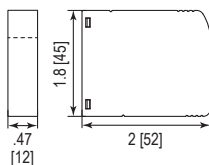


### SPI-2 Series

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#### Dimensions

Weight per Unit	1.90 oz [54 g]
Dimensions DIN 43880	2/3 TE
Packaging Dimensions (Single Unit)	3.4 x .59 x 4" [87 x 15 x 102 mm]
Minimum Package Quantity	15 pieces



### SPI-2-xxxM Series

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#### Dimensions

Weight per Unit	.84 oz [24 g]
Packaging Dimensions (Single Unit)	3.4 x .59 x 4" [87 x 15 x 102 mm]
Minimum Package Quantity	15 pieces

inches  
[mm]

Information contained in this document is subject to change at any time without notice.

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