

DATA SHEET**SPD for DC Power Supply & Data****RayDat SUH-2 PS****D1 • C1 • C2 • C3**

IEC/EN Category: D1/C1/C2/C3
 Mode of Protection: Longitudinal, Transverse
 Coarse Protection: 3 Terminal GDT (Data Line)
 MOVs (PS Line)

Voltages: 24V DC (Data Line)
 24V AC (Power Line)

Frequency Range: 30MHz

Surge Discharge Ratings: I_n : 10kA, I_{max} : 20kA, I_{imp} : 2.5kA

Series Load Current: 1A (Data Line), 3A (PS Line)

Enclosure: DIN 43880 2/3 TE, DIN Rail Mount

Terminals: Stranded to 4 mm²

Housing: Modular Design

Compliance: IEC/EN 61643-21

The RayDat SUH-2 PS Series has been developed for protection of systems with one supply and one signal line (CAN bus, DeviceNet,...).

This efficient overvoltage protective device is intended to protect line from overvoltage surges and electrostatic discharges created by switching transients in buildings.

The signal line circuit is designed to minimize inter-capacitance, and shunt capacitance, thereby maximizing the operating frequency to 30 MHz.

If the module is unplugged out of the base, the connection lines remain enabled.

Technical Data

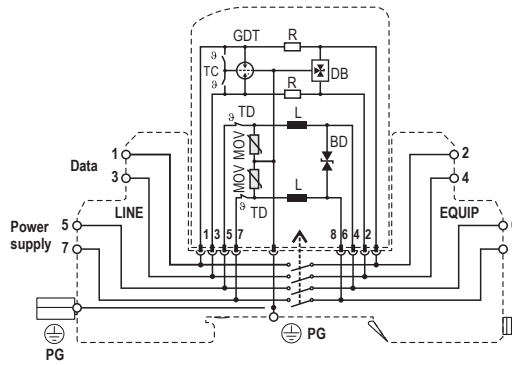
SUH-2 PS		Data Line	Power Supply Line
Electrical			
Lines Protected		2 (1 Data Line + 1 Power Supply Line)	
Nominal Operating Voltage (DC)	U_n	24V	24V AC/30V DC
Maximum Continuous Operating Voltage (DC)	U_c	28V	28V AC/40V DC
Rated Load Current at 25°C	I_L	1A	3A
C2 Nominal Discharge Current (8/20µs)	I_n		10kA
Maximum Discharge Current (8/20µs)	I_{max}		20kA
D1 Impulse Current (10/350µs)	I_{imp}		2.5kA
Residual Voltage at 5kA (8/20µs)	U_{res}	<70V	<100V
Rated Spark Overvoltage	(Line-Ground)	31-37V	90-110V
	(Line-Line)	31-37V	42-52V
Response Time Overvoltage Protection	t_A		<1 ns
Insulation Resistance of the Protection	R_{iso}	≥ 28MΩ	≥ 40MΩ
Serial Resistance per Path	R	1.6-2.0Ω	<0.2Ω
Serial Inductivity	L		15µH
Transverse Capacitance	C	50pF	6.0nF
Cut-off Frequency	f_G	30MHz	1 kHz
Mechanical			
Temperature Range		-40 °F to +176 °F [-40 °C to +80 °C]	
Terminal Cross Section Multi-strand (max.)		12 AWG [4 mm ²]	
Terminal Screw Torque		4.5 lbf-in [0.5 Nm]	
Degree of Protection IEC/EN 60529		IP20 (built-in)	
Housing Material		Thermoplastic; Grey; Extinguishing Degree V-0	
Mounting IEC/EN 60715		35 mm DIN Rail	
Order Information			
Order Code		24	
SUH-2-xxPS		7086.81	
SUH-2-xxPSM (module)		7086.82	

RayDat SUH-2 PS

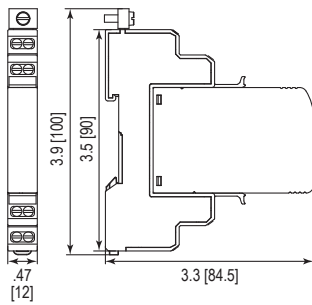
Internal Configuration

Legend

- BD Bi-directional TVS Diode
- DB Diode Block
- GDT Gas Discharge Tube
- L Inductor
- MOV Metal Oxide Varistor
- PG Protective Grounding
- R Resistor
- TC Thermo-clip
- TD Thermal Disconnecter



Dimensions & Packaging

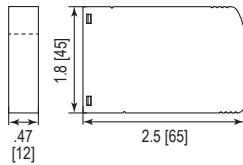


SUH-2-xxPS

24

Dimensions

Weight per Unit	2.53 oz [72 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



SUH-2-xxPSM

24

Dimensions

Weight per Unit	1.19 oz [34 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.

