

DATA SHEET

SPD with Single Protection Mode

RayDat SCL-1 Series**C1 • C3**

IEC/EN Category: C1/C3
 Mode of Protection: Transverse
 Fine Protection: MOV
 Voltages: 12, 24V DC
 Frequency Range: 0.5 MHz
 Surge Discharge Ratings: I_n : 500 A
 Series Load Current: 10 A
 Enclosure: DIN 43880 1/3TE, DIN Rail Mount
 Terminals: Stranded to 4 mm²
 Housing: Compact Design
 Compliance: IEC/EN 61643-21

The RayDat SCL-1 Series has been developed to protect data transmission circuits or low voltage alarm circuits such as fire or security.

The unit provides fine protection using a MOV.

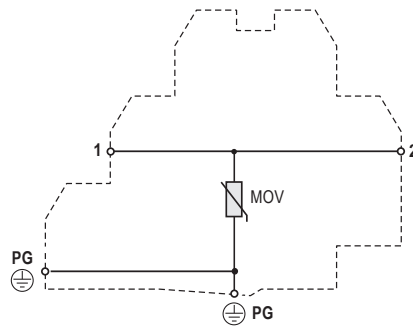
Where necessary, the SCL-1 may be used with a higher energy coarse protection unit such as the SUR-2 110 Series.

Technical Data

SCL-1 Series		12	24
Electrical			
Lines Protected		1 Conductor	
Nominal Operating Voltage (DC)	U_n	12V	24V
Maximum Continuous Operating Voltage (DC)	U_c	22V	38V
Rated Load Current at 25°C	I_L	10 A	
C1 Nominal Discharge Current (8/20 μs)	I_n	500 A	
Residual Voltage at I_n (8/20 μs)	U_{res}	<48V	<87V
Rated Spark Overvoltage		24-30V	42-52V
Response Time Overvoltage Protection	t_A	<25 ns	
Insulation Resistance of the Protection	R_{iso}	≥ 1.5 MΩ	≥ 3.0 MΩ
Serial Resistance per Path	R	<0.1 Ω	
Transverse Capacitance	C	<10 nF	<6.0 nF
Cut-off Frequency	f_G	0.5 MHz	
Mechanical			
Temperature Range		-40 °F to +176 °F [-40 °C to +80 °C]	
Terminal Cross Section (max.)		Stranded to 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; Beige; Extinguishing Degree V-0	
Mounting IEC/EN 60715		35 mm DIN Rail	
Order Information			
Order Code		12	24
SCL-1-xx		704 552	704 553

RayDat SCL-1 Series

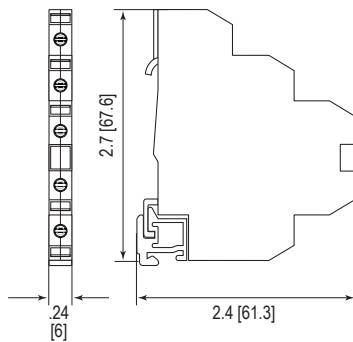
Internal Configuration



Legend

MOV Metal Oxide Varistor
PG Protective Grounding

Dimensions & Packaging



SCL-1 Series	12	24
Dimensions		
Weight per Unit	.98 oz [28 g]	
Dimensions DIN 43880	1/3 TE	
Packaging Dimensions (Single Unit)	3.5 x 5.9 x .3" [90 x 150 x 8 mm]	
Minimum Package Quantity	40 pieces	

inches
[mm]

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

RoHS
COMPLIANT  CE

Raycap

www.raycap.com

© 2018 Raycap All rights reserved.
G29-00-034 180411