DATA SHEET

SPD with Terminal Connection for Data Circuits

RayDat GD

C1 • C2 • C3

IM-GD

IEC/EN Category: C1/C2/C3
Mode of Protection: Transverse, Differential
Voltages: 110 V DC
Maximum Operating Voltage: 170 V DC
Surge Discharge Ratings: I_n: 5 kA, I_{max}: 10 kA
Series Load Current: 6 A
Enclosure: PCB Hybrid
Terminals: Flying Leads or Screw Terminals
Housing: Compact Design
Compliance: IEC/EN 61643-21

The RayDat GD Series is intended as a generic protector for data circuits.

It provides coarse protection via a three terminal gas discharge tube.

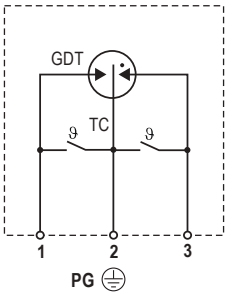
An internal thermal disconnector provides protection during mains incursion.

Technical Data

GD			
Electrical			
Number of Protected Pairs			1 (2 conductors)
Nominal Operating Voltage (DC)		U_n	110 V
Maximum Continuous Operating Voltage (DC)		U_c	170 V
Rated Load Current at 25°C		I_L	6 A
C2 Nominal Discharge Current (8/20 µs)		I_n	5 kA
Maximum Discharge Current (8/20 µs)		I_{max}	10 kA
Residual Voltage at 5 kA (8/20 µs)		U_{res}	< 700 V
Rated Spark Overvoltage	(Line-Ground)		184-312 V
	(Line-Line)		184-624 V
Response Time Overvoltage Protection		t_A	< 100 ns
Thermal Protection			Yes
Insulation Resistance of the Protection		R_{iso}	≥ 1 GΩ
Transverse Capacitance		C	< 1 pF
Cut-off Frequency		f_G	30 MHz
Mechanical			
Temperature Range			-40 °C to +80 °C
LIne Conductors Cross Section			0.5 mm²
Ground Conductor Cross Section			0.75 mm²
Connecting Conductor Length			150 mm
Degree of Protection IEC/EN 60529			IP 20
Housing Material			Thermoplastic; Grey; Extinguishing Degree V-0
Order Information			
Order Code			
GD			127 701

RayDat GD

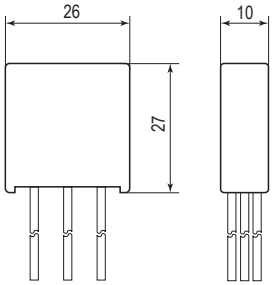
Internal Configuration



Legend

GDT Gas Discharge Tube
PG Protective Grounding
TC Thermo-clip

Dimensions & Packaging



GD

Dimensions	
Weight per Unit	12 g
Packaging Dimensions (Single Unit)	61 × 49 × 21 mm
Minimum Package Quantity	30 pieces