



SMD Spark Gap Protectors SPG 1000A 100M/50V SOCAY SCB-141N-SMD

Our Product Introduction

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Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: REACH, RoHS, ISO
- Model Number: SCB-141N-SMD
- Minimum Order Quantity: Negotiable
- Price: Negotiable
- Delivery Time: 5-8 work days



Product Specification

- Item: Spark Gap Protectors
- Package Size: SMD
- VS: 140(119~221)V
- IR/DC: 100M/50V
- C: 1.0pF
- 8/20μS: 1000A
- Surge Life Test: 10KV / 150A , >200T
- Highlight: **Spark Gap Protectors SPG, SMD Spark Gap Protectors**



More Images



Product Description

SOCAY SCB-141N-SMD SMD Spark Gap Protectors (SPG) 1000A @8/20μS IR/DC 100M/50V

DATASHEET: [SCB-SMD_v2204.1.pdf](#)

Part Number	DC Spark-over Voltage Vs(V)	Minimum Insulation Resistance IR(OHM)/DC	Maximum Capacitance 1KHZ-6Vmax C (pF)	Surge Current Capacity 8/20 μS	Surge Life Test
SCB-141N-SMD	140(98~182)	100M / 50V	1.0	1000A	10KV / 150A , >200T
SCB-181N-SMD	180(126~234)	100M / 50V	1.0	1000A	10KV / 150A , >200T
SCB-201M-SMD	200(160~240)	100M / 100V	1.0	1000A	10KV / 150A , >200T
SCB-301M-SMD	300(240~360)	100M / 100V	1.0	1000A	10KV / 150A , >200T
SCB-401M-SMD	400(320~480)	100M / 250V	1.0	1000A	10KV / 150A , >200T
SCB-501M-SMD	500(400~600)	100M / 250V	1.0	1000A	10KV / 150A , >200T



I.Selection method /Model Name

- 1,To know the customer's operating voltage, product, application port, protection level.
- 2,Minimum DC breakdown voltage > 1.2 times the normal DC operating voltage.
- 3,Select the package, size and flow rate of the device according to the application port and protection level.

Applications:

All kinds of power products, isolators, inverters, medical equipment, 485 converter, communication products, security products.

Items	Test Method	Standard

DC Spark-over Voltage	Measure starting discharge voltage (Vs) by gradually increasing applied DC voltage. Test current is 0.5mA max. And the DC voltage ascends up within 100V/s (Vs 1000V) or 500V/s (Vs ≥ 1000V).	Rate-of-change, within ±30% insulation resistance & capacitance, conformed to rated spec.
Insulation Resistance	Measure the insulation resistance across the terminal at regular voltage. But the test voltage doesn't over the DC spark-over voltage.	
Capacitance	Measure the electrostatic capacitance by applying a voltage of less than 6V (at 1KHz) between terminals.	
Static Life	10KV with 1500pf condenser is discharged through 2KΩ resistor. 200 times at an interval of 10sec.	$ \Delta V_s/V_s \leq 30\%$ Characteristics of other items must meet the specified value
Surge Current Capacity	1.2/50μs & 8/20μs, 1000A, electrically connected with a resistor (1~2 Ω), ±5 times, each time interval 60 seconds. Thereafter, outer appearance shall be visually examined.	No crack and no failures
Cold Resistance	Measurement after -40 /1000 HRS & normal temperature/2 HRS.	Features are conformed to rated spec
Heat Resistance	Measurement after 125 /1000 HRS & normal temperature/2 HRS.	
Humidity Resistance	Measurement after humidity 90~95 (45) /1000 HRS & normal temperature/2 HRS.	
Temperature Cycle	10 times repetition of cycle -40 /30min → normal, temp/2 min → 125 /30min, measurement after normal temp/2 HRS.	
Solder Ability	Apply flux and immerse in molten solder 230±5 for 3sec up to the point of 1.5mm from body. Check for solder adhesion.	Lead wire is evenly covered by solder
Solder Heat	Measurement after lead wire is dipped up to the point of 1.5mm from body into 260±5 solder for 10sec	Conformed to rated spec
Pull Strength	Apply 0.5kg load for 10sec	Lead shall not pull out to snap
Flexural Strength	Bend lead wire at the point of 2mm from body under 0.25 load and back to its original point. Repeat 1 time.	

Part Numbering

SCB - 201 M - SMD

(1) (2) (3) (4)

(1) Series

(2) Vs Voltage, e.g. 201=20X10¹=200V

(3) Vs Voltage tolerance: L - ±15%, M - ±20%, N - ±30%

(4) Surface mount devices

Dimensions

Technical drawing of the SCB-201 M SMD component. The drawing includes three views: a top view, a side view, and an end view. The top view shows a rectangular component with a central circular feature. The side view shows the component's profile with dimensions L (length), D (total diameter), d (inner diameter), and T (thickness). The end view shows the component's cross-section with dimensions 2, 2.8, and 2. The recommended pad size is indicated as 2 mm.

Recommended Pad Size (mm)

Dimensions	Millimeters
L	5.0±0.5
D	φ2.6±0.5
d	φ2.5±0.5
T	0.4±0.1

SOCAY's main products include a full range of Ceramic Gas Discharge Tubes (GDT), Transient Suppression Diodes (TVS Diodes), ESD Suppressor, Thyristor Surge Suppressors (TSS), Spark Gap Protectors (SPG), Varistors (MOV), Chip Varistors (MLV), PTC Resettable Fuse, Negative Temperature Coefficient thermistors (NTC Thermistors), Chip Bead, Schottky Diodes, Zener Diode, etc. From circuit design to product testing (and provide test reports), we will provide you with one-stop services in the field of circuit protection. With excellent quality and service, SOCAY has won extensive praise from customers and respect from the industry.

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