

FEATURES

| Bilateral symmetrical.

| Less decay at on/off state.

| High capability to withstand repeated lightning strikes.

Low electrode capacitance ($\leq 1.0 \text{pF}$) and high isolation ($\geq 100 \text{M}\Omega$).

| Working temperature range: : -45°C~ +85°C

| Storaging temperature range: -45°C ~ +85°C



Ф3.1*4.3/5.3

APPLICATIONS

Power Supplies

| Motor sparks eliminating

| Relay switching spark absorbing

| Data line pulse guarding

I Telephone/Fax/Modem

| High frequency signal transmitters/receivers

Satellite antenna

Radio amplifiers

Alarm systems

| Cathode ray tubes in Monitors/ Television Viewing Systems

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003



ELECTRICAL CHARACTERISTICS

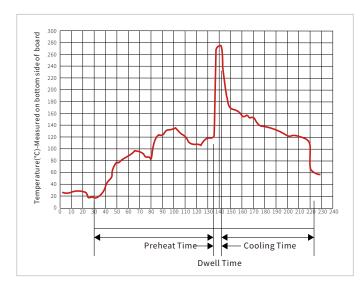
Part Number	DC Spark-Over Voltage	Min. r Insulation Resistance		Max. Capacitance (1kHz-6Vmax.)	Surge Current Capacity	Surge Life Test
r die Hambei	Vs	Test Voltage	I _R	Cj	8/20μs	@8/20μs
	V	V	MΩ	pF	А	
SPG302-141N	140(126-210)	50	100	1	3000	150A 10 times
SPG302-181N	180±30%	50	100	1	3000	150A 10 times
SPG302-201M	200±20%	100	100	1	3000	150A 10 times
SPG302-301M	300±20%	100	100	1	3000	150A 10 times
SPG302-401M	400±20%	250	100	1	3000	150A 10 times
SPG302-501M	500±20%	250	100	1	3000	150A 10 times
SPG302-601M	600±20%	250	100	1	3000	150A 10 times
SPG302-701M	700±20%	250	100	1	3000	150A 10 times
SPG302-102M	1000±20%	500	100	1	3000	150A 10 times
SPG302-122M	1200±20%	500	100	1	3000	150A 10 times
SPG302-152M	1500±20%	500	100	1	3000	150A 10 times
SPG302-202M	2000±20%	500	100	1	3000	150A 10 times
SPG302-242M	2400±20%	500	100	1	3000	150A 10 times
SPG302-302M	3000±20%	500	100	1	3000	150A 10 times



TEST METHODS AND RESULTS

Test Item	Test Method	Specification
DC Spark-over Voltage Vs(V)	Measure starting discharge voltage (Vs) by gradually increasing applied DC voltage. Test current is 0.5mA max. And the DC voltage ascends up within 500V/second.	
Insulation Resistance	Measure the insulation resistance across the terminal at regular voltage. But the test voltage doesn't over the DC spark-over voltage.	100M Ω min.
Capacitance Cj(pF)	Measure the electrostatic capacitance by applying a voltage of less than 6V (at 1KHz) between terminals.	1pF max.
Life	10KV with 1500pf condenser is discharged through 0Ω resistor. 200 times at an interval of 10sec.	I △Vs/Vs I ≤30% Characteristics of other items must meet the specified value.
Surge Current Capacity	$1.2/50\mu s$ & $8/20\mu s$, $3000A$, electrically connected with a resistor (4~6 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°C/1000 HRS & normal temperature/2 HRS.	
Heat Resistance	Measurement after 125°C/1000 HRS & normal temperature/2 HRS.	Features are conformed to rated spec.
Humidity Resistance	Measurement after humidity 90~9°C(45°C) /1000 HRS & normal temperature/2 HRS.	
Temperature Cycle	10 times repetition of cycle -40°C/30min →normal, temp/2 min →125°C/30min, measurement after normal temp/2 HRS.	

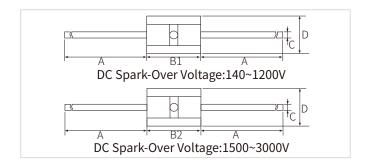
WAVE SOLDERING



	Wave Parameter	Lead-free assembly
	Temperature Min	100°C
Pre Heat	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solderpo	t Temperature	280°C Max
Solder Dv	vell Time	2-5 seconds

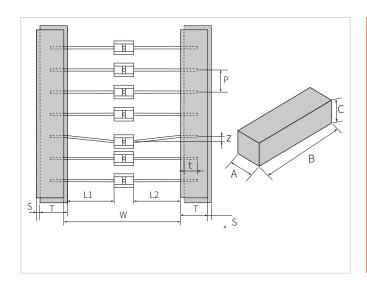


DIMENSIONS



Ref.	Dimensions			
Nei.	Millimeters	Inches		
А	28±3.0	1.102±0.118		
B1	4.3±0.3	0.169±0.012		
B2	5.3±0.3	0.209±0.012		
С	0.5±0.05	0.02±0.002		
D	Ф3.1±0.3	Ф0.122±0.012		

TAPING AND REEL SPECIFICATIONS



Ref.	Dimensions			
Kei.	Millimeters	Inches		
W	52.5±1.5	2.067±0.059		
Р	5.0±0.5	0.197±0.02		
L1-L2	1.0 max	0.039max		
Т	6.0±1.0	0.236±0.039		
Z	1.2max	0.047max		
t	3.2max	0.126max		
S	0.8max	0.031max		
А	75.0	2.953		
В	68.0	2.677		
С	255.0	10.039		

ORDERING INFORMATION

Part Number	Size	QTY/Reel	Description
SPG302-XXXX	Ф3.1*4.3/5.3mm	1500PCS	Вох



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