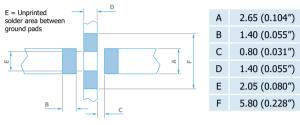
# SBSGC

SBSGC

#### Dimensions L1 4.55±0.25 (0.179"±0.010") 1.2 L2 4.70±0.4 (0.185"±0.015") L1 w 3.20±0.2 (0.126"±0.008") Т 2.50±0.15 (0.098"±0.006") B2 - -► B1 -Β1 1.50±0.4 (0.059"±0.015") Tin plated solderable term B2 0.30±0.25 (0.012"±0.010") Solder joint from filter manufacture Suggested mounting pad details



It is recommended that designers independently confirm pad dimensions are acceptable, particularly with respect to higher working voltages.

## **Flectrical Details**

Electrical Details		
Electrical Configuration	C Filter	
Capacitance Measurement	@ 1000hr Point	
Current Rating	10A	
Insulation Resistance (IR)	$10 \text{G}\Omega$ or $1000 \Omega \text{F}$	
Temperature Rating	-55°C to +125°C	÷ C
Ferrite Inductance (Typical)	N/A	
Mechanical Details		
Terminals & Finish - End	SnAg solder over Sn	Plate
Terminals & Finish - Side	Sn Plated	
Reflow Temperature	220°C max.	
Construction	Ceramic Multi Layer C Copper Alloy Through Soldered End Connec	n Conductor
Weight (Typical)	0.20g <i>(0.007oz)</i>	

Reeled quantities	SBSGC
178mm (7") reel	500

	Constant la constant de la constant		Rated	DWV	Approximate Resonant	Typical No-Load Insertion Loss (dB)*				
Product Code	Capacitance (±20%)	Dielectric	Voltage (dc)	(dc)	Frequency (MHz)			1GHz		
SBSGC5000102MX	1.0nF		500	750	186	0	0	5	23	18
SBSGC5000152MX	1.5nF		500	750	147	0	0	8	27	18
SBSGC5000222MX	2.2nF		500	750	130	0	0	11	32	18
SBSGC5000332MX	3.3nF		500	750	110	0	1	14	34	18
SBSGC5000472MX	4.7nF		500	750	100	0	2	17	40	18
SBSGC5000682MX	6.8nF		500	750	80	0	4	20	38	18
SBSGC5000103MX	10nF		500	750	62.5	0	5	24	38	18
SBSGC5000153MX	15nF	X7R	500	750	50	0	8	27	38	18
SBSGC5000223MX	22nF		500	750	39	0	11	32	39	18
SBSGC5000333MX	33nF		500	750	33	1	14	34	39	18
SBSGC5000473MX	47nF		500	750	28	2	17	36	39	18
SBSGC2000683MX	68nF		200	500	23	3	20	37	39	18
SBSGC1000104MX	100nF		100	250	19	5	23	41	39	18
SBSGC1000154MX	150nF		100	250	15.5	8	27	47	39	18
SBSGC0500224MX	220nF		50	125	13	11	30	49	39	18

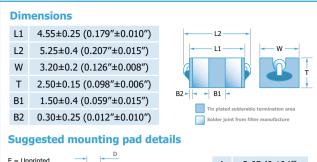
\* Insertion Loss performance quoted is measured on an open FR4 board mounted on a brass backplane in a 50Ω system. Performance curves can be supplied on request. Performance in circuit is liable to be different and is affected by board material, track layout, grounding efficiency and circuit impedances. Shielding can be used to improve high frequency performance.

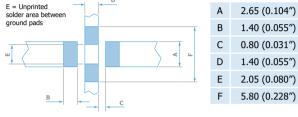
### **Ordering Information - SBSGC range**

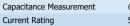
SB	S	G	С	500	0473	М	X	В
Туре	Case style	Size	Electrical configuration	Voltage (dc)	Capacitance in picofarads (pF)	Tolerance	Dielectric	Packaging
Syfer Board Filter	Surface Mount	Size Code <b>G</b> (nominally 1812)	<b>C</b> = C Filter	<b>050</b> = 50V <b>100</b> = 100V <b>200</b> = 200V <b>500</b> = 500V	First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is number of zeros following Example: <b>0472</b> = 4700pF 0683 = 68000pF	<b>M</b> = ±20%	<b>X</b> = X7R	T = 178mm (7") reel R = 330mm (13") reel B = Bulk

Note: The addition of a 4-digit numerical suffix code can be used to denote changes to the standard part. Options include for example: change of finish / alternative voltage rating / non-standard intermediate capacitance values / test requirements. Please refer specific requests to the factory.

## SBSGP







**Electrical Details** 

Insulation Resistance (IR)

Ferrite Inductance (Typical)

**Mechanical Details** 

Terminals & Finish - End

Terminals & Finish - Side

Reflow Temperature

Construction

Weight (Typical)

Temperature Rating

Electrical Configuration

### @ 1000hr Point 5A $10G\Omega$ or $1000\Omega$ F -55°C to +125°C 0.7µH (@ 100kHz) SnAg solder over Sn Plate Sn Plated 220°C max. Ceramic Multi Layer Chip Capacitor

Copper Alloy Through Conductor Ferrite Bead Inductor

Soldered End Connections

0.20g (0.007oz)

D

7R

### **Reeled quantities** SBSGP 178mm (7") reel 500

Pi Filter

It is recommended that designers independently confirm pad dimensions are acceptable, particularly with respect to higher working voltages.

Product Code	Capacitance	Dielectric	Rated Voltage	DWV	Approximate Resonant	Typical No-Load Insertion Loss (dB)*				
Product Code	(±20%)	(dc) (dc)		Frequency (MHz)	0.1MHz	1MHz	10MHz	100MHz	1GHz	
SBSGP5000102MX	1.0nF		500	750	140	0	0	5	39	18
SBSGP5000152MX	1.5nF		500	750	100	0	0	8	41	18
SBSGP5000222MX	2.2nF		500	750	75	0	0	10	39	18
SBSGP5000332MX	3.3nF		500	750	54	0	1	15	39	18
SBSGP5000472MX	4.7nF		500	750	44	0	2	17	39	18
SBSGP5000682MX	6.8nF		500	750	35	0	3	23	39	18
SBSGP5000103MX	10nF		500	750	28	0	5	28	39	18
SBSGP5000153MX	15nF	X7R	500	750	23	0	8	35	39	18
SBSGP5000223MX	22nF		500	750	19	0	10	43	39	18
SBSGP5000333MX	33nF		500	750	15	1	12	46	39	18
SBSGP5000473MX	47nF		500	750	12	2	14	53	39	18
SBSGP2000683MX	68nF		200	500	10	3	16	55	39	18
SBSGP1000104MX	100nF		100	250	7.5	5	17	56	39	18
SBSGP1000154MX	150nF		100	250	6	8	20	58	39	18
SBSGP0500224MX	220nF		50	125	5.2	11	25	58	39	18

\* Insertion Loss performance quoted is measured on an open FR4 board mounted on a brass backplane in a 50Ω system. Performance curves can be supplied on request. Performance in circuit is liable to be different and is affected by board material, track layout, grounding efficiency and circuit impedances. Shielding can be used to improve high frequency performance.

### **Ordering Information - SBSGP range**

SB	S	G	Р	050	0224	М	X	В
Туре	Case style	Size	Electrical configuration	Voltage (dc)	Capacitance in picofarads (pF)	Tolerance	Dielectric	Packaging
Syfer Board Filter	Surface Mount	Size Code <b>G</b> (nominally 1812)	P = Pi Filter	<b>050</b> = 50V <b>100</b> = 100V <b>200</b> = 200V <b>500</b> = 500V	First digit is 0. Second and third digits are significant figures of capacitance code. The fourth digit is number of zeros following Example: <b>0472</b> = 4700pF <b>0683</b> = 68000pF	<b>M</b> = ±20%	<b>X</b> = X7R	T = 178mm (7") reel R = 330mm (13") reel B = Bulk

Note: The addition of a 4-digit numerical suffix code can be used to denote changes to the standard part. Options include for example: change of finish / alternative voltage rating / non-standard intermediate capacitance values / test requirements. Please refer specific requests to the factory.