



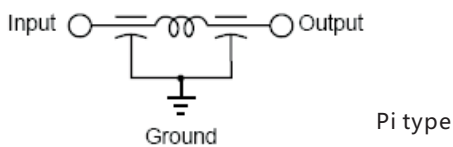
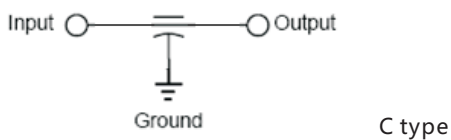
### Features

- SMD filters
- Non-polarity
- High weldability
- Comply with ROHS

### Typical applications

- High current power bus
- Digital audio equipments
- Communication equipments

### Circuit



### Technical specifications

Work voltage (Max):	250VDC
Rated current (Max):	20ADC
Withstand voltage:	2.5UR
Dielectric loss:	≤3%
Capacity and Tolerance:	see table 2
Insulation Resistance:	≥4000MΩ (100VDC, 25°C)
Operating Temperature:	-40°C~85°C -55°C~125°C

### Dimension (in Inches [Metric])

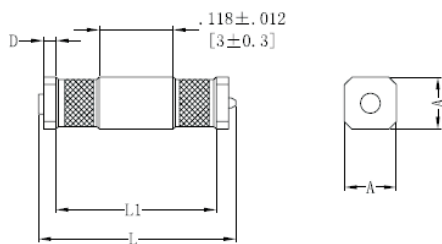
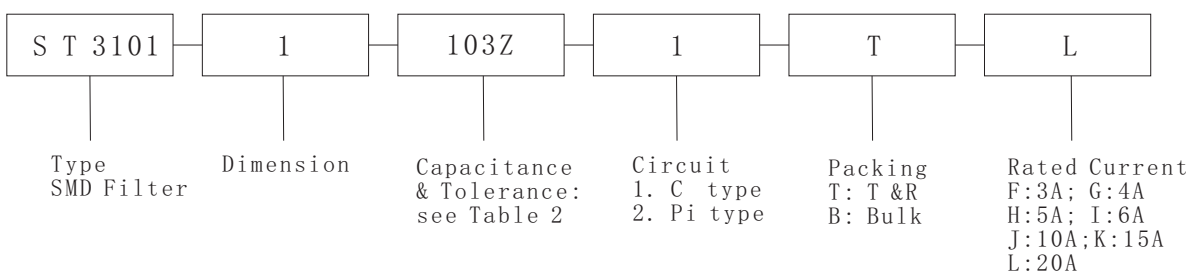


Table 1 Dimension

Type	L	L1	D	A
ST3101-1	.315±.02 [8±0.5]	.256±.012 [6.5±0.3]	.020±.004 [0.5±0.1]	.087±.008 [2.2±0.2]
ST3101-2	.315±.02 [8±0.5]	.256±.012 [6.5±0.3]	.020±.004 [0.5±0.1]	.118±.008 [3.0±0.2]
ST3101-3	.472Max [12Max]	.394±.012 [10±0.3]	.031±.004 [0.8±0.1]	.157±.008 [4.0±0.1]

### Ordering information

For example: ST3101-1-103Z-1-T-L



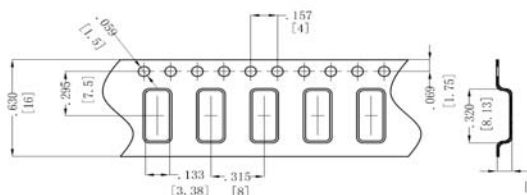
## Insertion Loss

Table 2 Capacitance and Insertion Loss

Circuit Type	Capacitance PF	Capacitance Tolerance	Min insertion loss (dB) (25°C no load)					
			1MHz	10MHz	100MHz	500MHz	1000MHz	1500MHz
C type	68	M: 20% S: +50%-20% Z: +80%-20% H: +100% 0%	-	-	-	7	15	20
	100		-	-	3	10	18	22
	150		-	-	3	15	20	25
	200		-	-	3	15	20	25
	470		-	-	10	15	25	30
	500		-	-	10	15	25	30
	1000		-	3	20	25	32	35
	1500		-	3	22	28	35	38
	2200		-	5	25	30	37	40
	2700		-	5	28	35	40	42
	3300		-	8	30	35	42	45
	4700		-	10	32	42	45	50
	6800		1	15	35	42	45	50
	10000		2	20	38	45	48	55
Pi type	68	M: 20% S: +50%-20% Z: +80%-20% H: +100% 0%	-	-	-	8	18	22
	100		-	-	3	10	18	22
	150		-	-	5	15	20	25
	200		-	-	5	15	22	26
	470		-	-	12	15	28	32
	500		-	-	12	15	28	35
	1000		-	4	21	26	33	38
	1500		-	4	24	30	36	40
	2200		-	6	26	32	38	40
	2700		-	6	29	36	40	42
	3300		-	9	31	36	42	45
	4700		-	10	32	42	45	50
	6800		1	15	35	43	45	50
	10000		3	20	40	48	50	55

### Packing

- ① Tape & Reel Packing (in Inches [mm])



- ② Bulk packing

### Storage

- ① Storage Period: 1 year  
 ② Sealed storage  
 ③ Storage temperature: -10°C to 40°C  
 ④ Relative humidity: 30% to 70%  
 ⑤ Avoid sudden changes in temperature and humidity  
 ⑥ Avoid vibration and exposure of sunlight

## Chengdu Shieldtechnic Co., Ltd.

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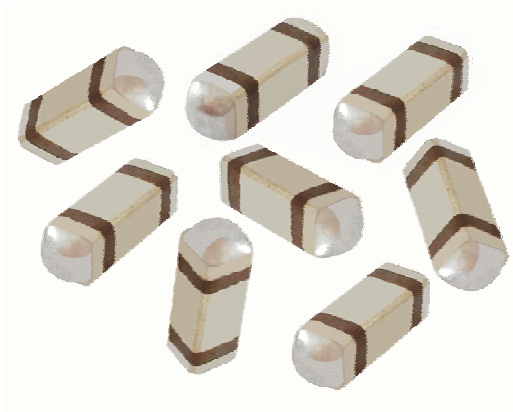
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## ST3102 Series

SMD Filters



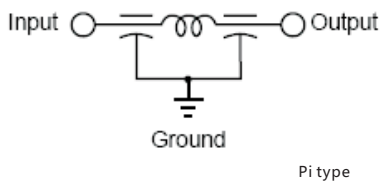
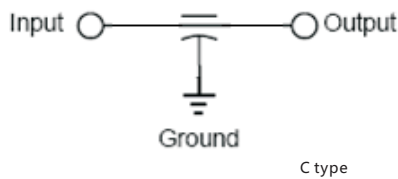
### Features

- SMD filters, Easy to place
- High weldability
- Comply with ROHS
- Packed in reel and tape or bulk form

### Typical applications

- Telecommunication Equipment
- Digital AV Equipment
- Computer and Peripheral Equipment

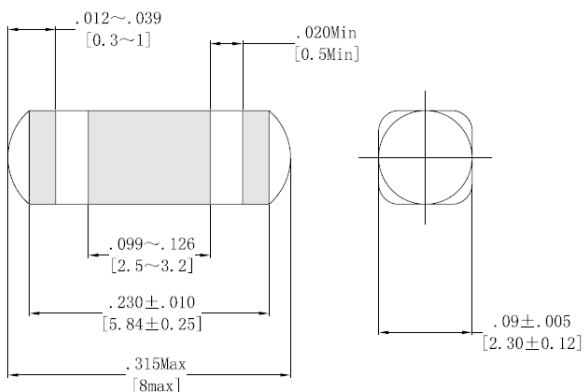
### Circuit



### Technical specifications

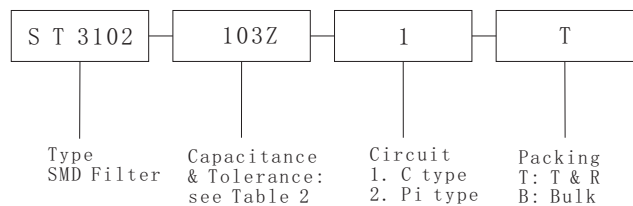
- Work Voltage (Max): 250VDC
- Rated Current (Max): 20ADC (C type)  
10ADC (Pi type)
- Withstand Voltage: 2.5UR
- Capacity and Tolerance: see table 2
- Insulation Resistance:  $\geq 10000M\Omega$  (100VDC, 25°C)
- Operating Temperature: -40°C ~ 85°C  
-55°C ~ 125°C
- Soldering Conditions: Max 250°C, 5S

### Dimension (in Inches [Metric])



### Ordering information

For example: ST3102-103Z-2-T

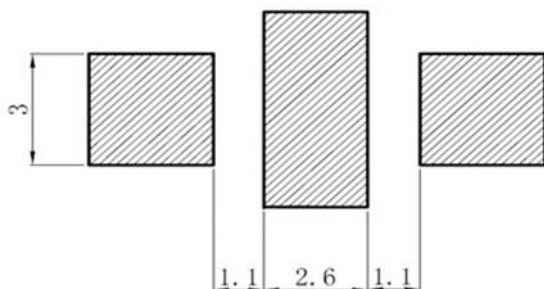


## Insertion Loss

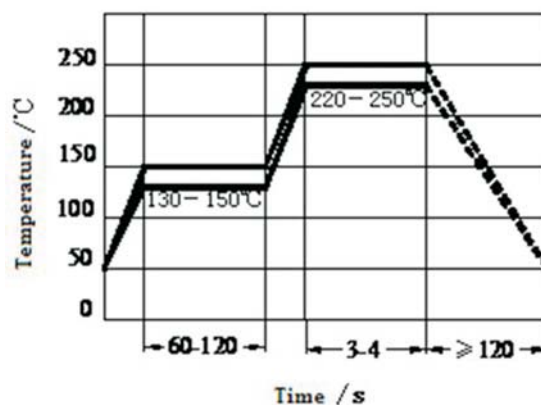
Table 2 Capacitance and Insertion Loss

Circuit Type	Capacitance ( pF )	Capacitance Tolerance	Min Insertion Loss(dB) (25°Cno load)		
			10MHz	100MHz	1000MHz
C	100	+80% -20%	-	3	18
	470		-	12	27
	1000		3	20	35
	1500		5	22	37
	2500		10	25	40
	4000		15	30	45
Pi	100	+80% -20%	-	3	16
	470		1	16	40
	1000		7	40	65
	2000		10	45	70
	4000		13	52	70

### Recommended solder pattern

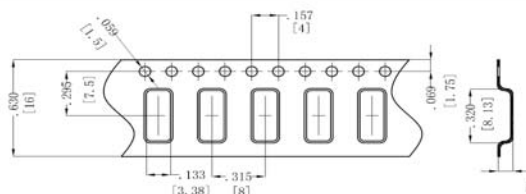


### Recommended reflow profile



### Packing

- 1) Tape & Reel Packing (in Inches [mm])



- 2) Bulk packing

### Storage

- 1) Storage Period: 1 year
- 2) Sealed storage
- 3) Storage temperature: -10 °C to 40 °C
- 4) Relative humidity: 30% to 70%
- 5) Avoid sudden changes in temperature and humidity
- 6) Avoid vibration and exposure of sunlight

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