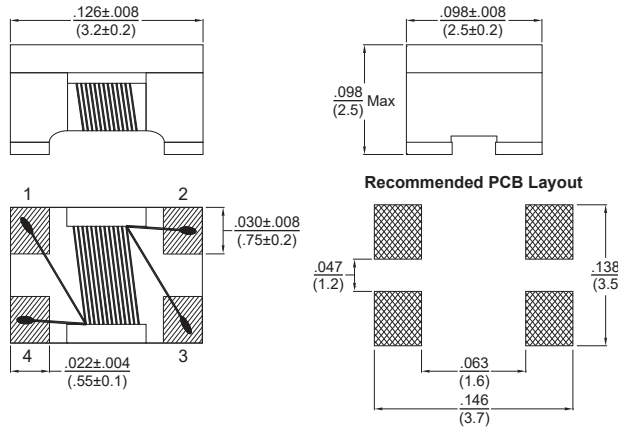




# Common Mode Filter

# SCM25FDV

Dimensions:  $\frac{\text{inch}}{\text{mm}}$



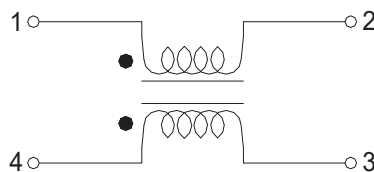
### Features

- SMD (1210) common mode filter
- Excellent noise attenuation in a small package
- Suitable for automated assembly
- SCM series offers wide impedance range
- Excellent solderability
- Halogen free
- Reliability test compliance to AEC-Q200

Allied Part Number	Impedance ( $\Omega$ ) 10MHz		Inductance ( $\mu$ H) +50%/-30%	Test Freq. KHz, 0.1V	Rated Current (mA)Max	Rated Voltage (Vdc) Max	DCR Max ( $\Omega$ )	IR (M $\Omega$ ) Min
	Min.	Typ.						
SCM25FDV-110-RC	300	550	11	100	300	80	0.40	10
SCM25FDV-220-RC	500	1100	22	100	250	80	0.50	10
SCM25FDV-510-RC	1000	2600	51	100	200	80	0.70	10
SCM25FDV-101-RC	2200	5100	100	100	150	80	1.50	10

All specifications subject to change without notice.

### Schematic



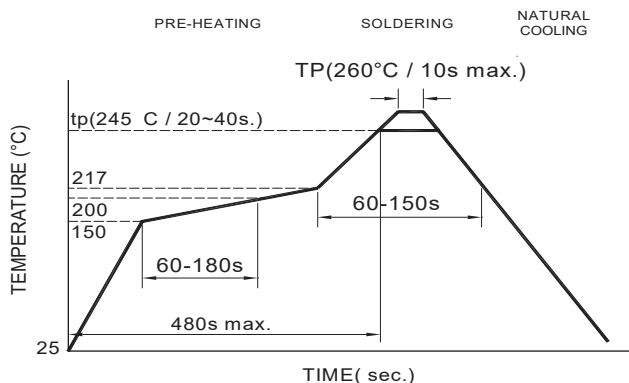
### Electrical

**Impedance range:** 550  $\Omega$  to 5100  $\Omega$   
**Inductance:** 11 $\mu$ H to 100 $\mu$ H  
**Tolerance:** 25% over entire range  
**Test Frequency:** 100KHz  
**Operating Temp:** -55°C to 150°C  
**Rated Current:** Based on temp rise of 40°C above ambient with no current

### Solderability

**Steam Aging:** 8H  $\pm$ 15M  
**Pre-Heat:** 150°C, 60S  
**Solder:** Sn96.5%, Ag3%, Cu0.5%  
**Temperature:** 245°C  $\pm$ 5°C  
**Flux for lead free:** Rosin 9.5%  
**Dip Time:** 4  $\pm$ 1S  
**Depth:** Completely cover termination

### Reflow Solder Profile



Reflow times: 1 times max.

### Test Equipment

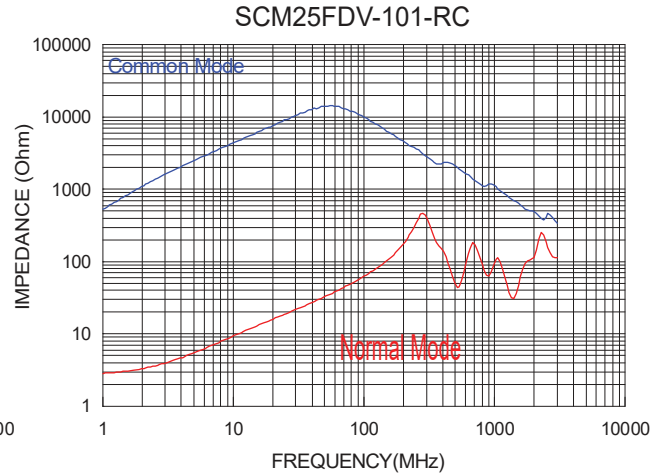
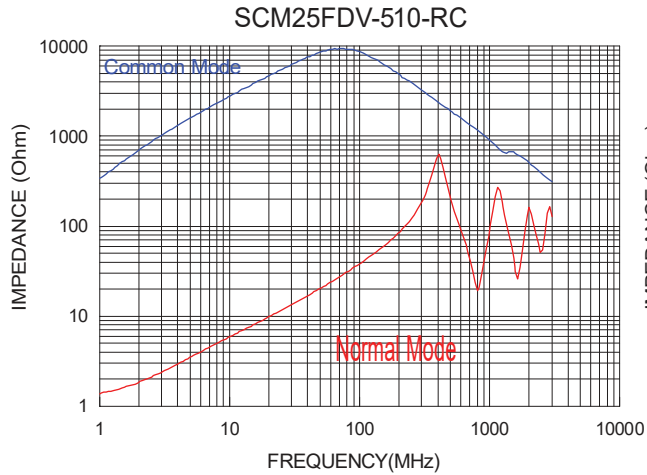
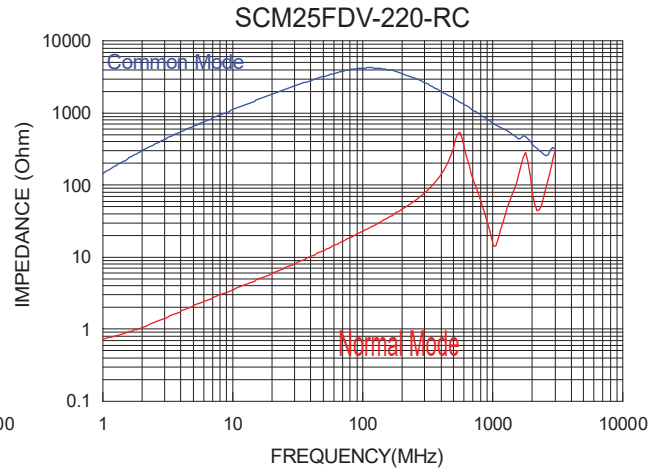
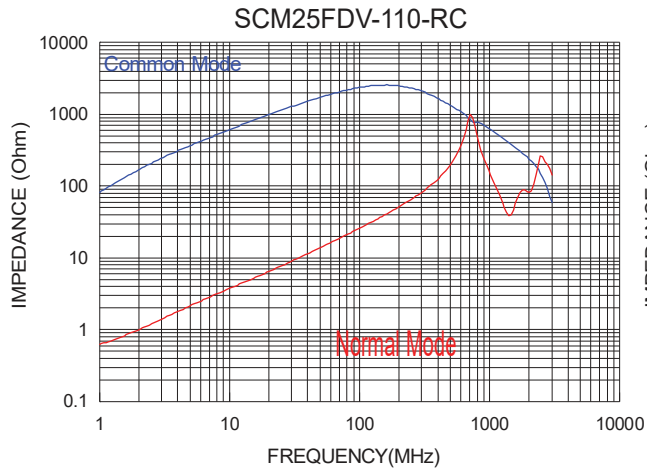
(L): Agilent 4291A, Agilent 16197A  
(DCR): Agilent 4338B  
Insulation Resistance: Agilent 4339

### Physical

**Packaging:** 2000pcs per 7 inch reel  
**Marking:** None



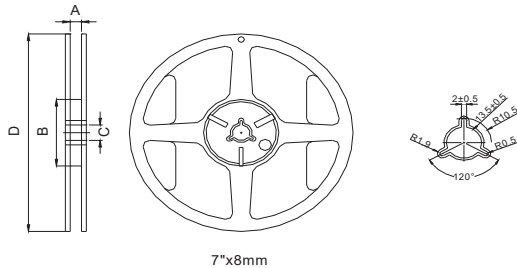
Typical Performance Curves





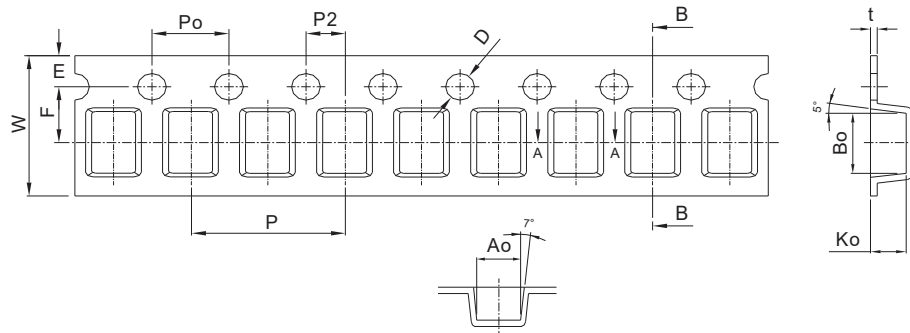
Packaging Information

(1) Reel Dimension



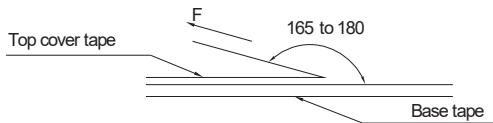
Type	A(mm)	B(mm)	C(mm)	D(mm)
178x8mm	9.0±0.5	60±2.0	13.5±0.5	178±2.0

(2) Tape Dimension



Bo(mm)	Ao(mm)	Ko(mm)	P(mm)	W(mm)	t(mm)	Emm	F(mm)	D(mm)	Po(mm)	P2(mm)
3.65±0.1	2.88±0.1	2.5±0.1	4.0±0.1	8.0±0.1	0.25±0.05	1.75±0.1	3.5±0.05	1.5±0.1	4.0±0.1	2.0±0.05

(3) Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

**Application Notice**

- Storage Conditions

To maintain the solderability of terminal electrodes:

1. SMC25FDV products meet IPC/JEDEC J-STD-020D standard-MSL, level 1.
2. Temperature and humidity conditions: Less than 40°C and 60% RH.
3. Recommended products should be used within 12 months from the time of delivery.
4. The packaging material should be kept where no chlorine or sulfur exists in the air.

- Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.