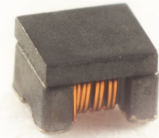
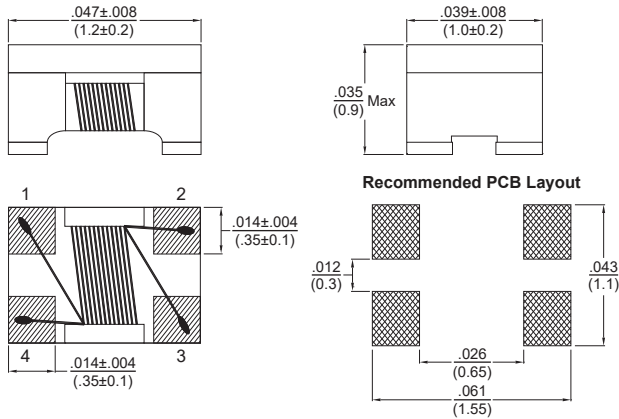




# Common Mode Filter

# SCMHF20

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



Allied Part Number	Impedance ( $\Omega$ ) $\pm 25\%$	Test Frequency MHz	DCR ( $\Omega$ ) Max	Rated Current (mA)	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	IR ( $\Omega$ ) Min
SCMHF20-500T-RC	50	100	0.3	250	50	125	10M
SCMHF20-670T-RC	67	100	0.3	250	50	125	10M
SCMHF20-900T-RC	90	100	0.4	200	50	125	10M

All specifications subject to change without notice.

### Features

- SMD (0504) common mode filter
- Excellent noise attenuation in a small package
- Suitable for automated assembly
- Excellent solderability
- Great for use in USB3.0 applications
- Halogen free

### Electrical

**Impedance range:** 50 $\Omega$  to 90 $\Omega$   
**Tolerance:** 25% over entire range  
**Test Frequency:** 100MHz  
**Operating Temp:** -40°C to +125°C  
**Rated Current:** Based on temp rise of 40°C above ambient with no current

### Solderability

**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

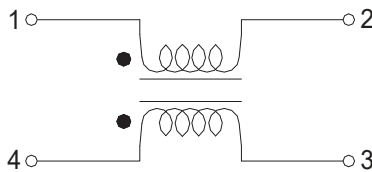
### Test Equipment

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

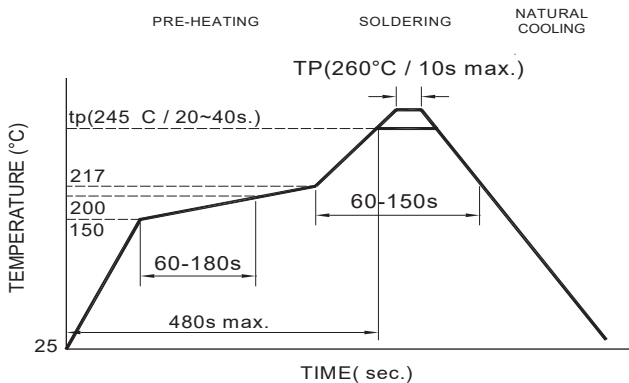
### Physical

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

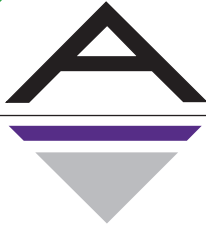
### Schematic



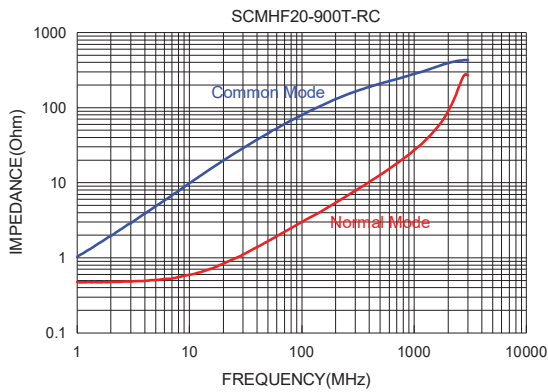
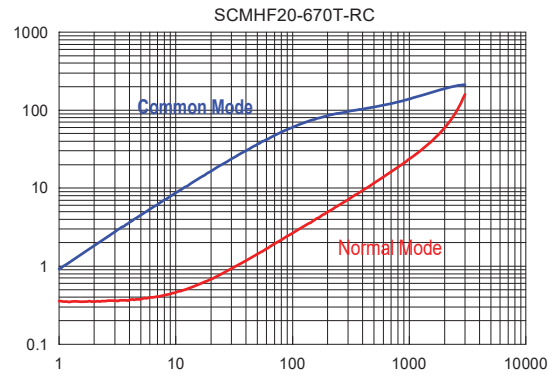
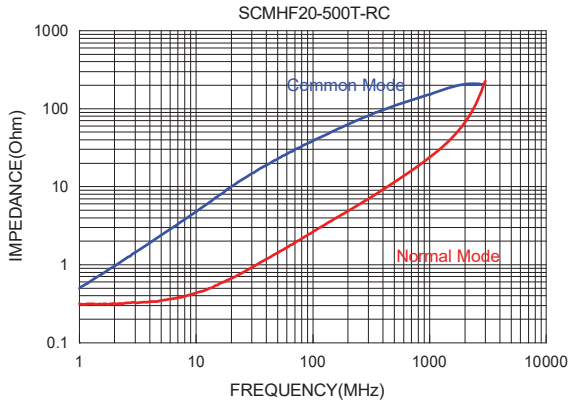
### Reflow Solder Profile



Reflow times: 3 times max.



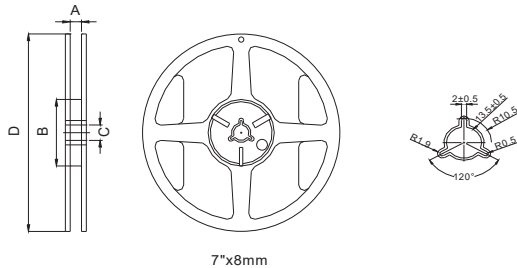
Typical Performance Curves





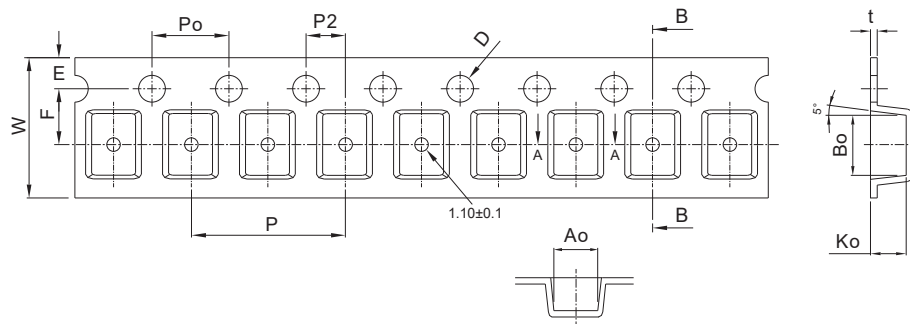
Packaging Information

(1) Reel Dimension



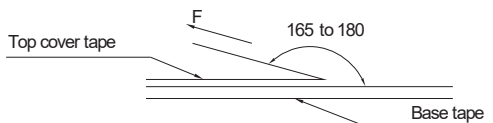
Type	A(mm)	B(mm)	C(mm)	D(mm)
178x8mm	9.0±0.5	60±2.0	13.5±0.5	178±2.0

(2) Tape Dimension



Bo(mm)	Ao(mm)	Ko(mm)	P(mm)	W(mm)	t(mm)	Emm	F(mm)	D(mm)	Po(mm)	P2(mm)
1.50±0.1	1.25±0.1	1.05±0.1	4.0±0.1	8.0±0.1	0.22±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. SCMHF20 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.