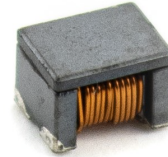
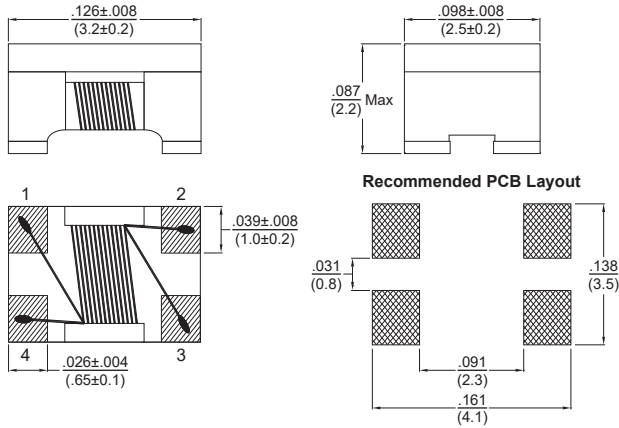




# Common Mode Filter

# ACP20

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



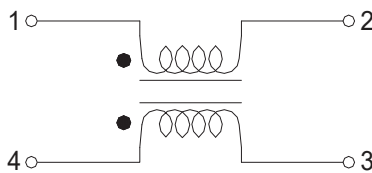
Allied Part Number	Common Mode Impedance ( $\Omega$ ) $\pm 25\%$	Test Freq. MHz	DCR Max ( $\Omega$ )	Rated Current (mA)Max	Rated Voltage (Vdc) Max	IR ( $M\Omega$ ) Min
ACP20-501	500	100	0.10	2000	60	10
ACP20-102	1000	100	0.10	1500	60	10

All specifications subject to change without notice.

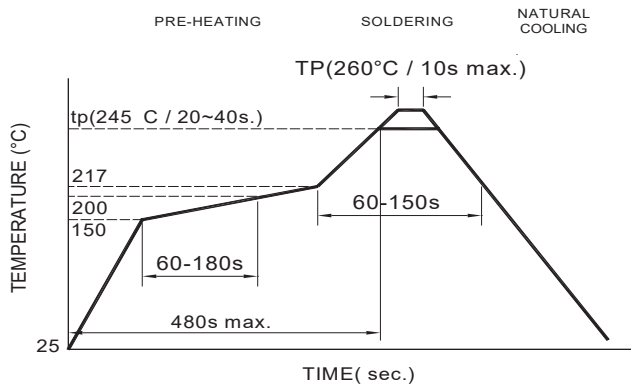
### Features

- SMD (1210) common mode filter
- Excellent noise attenuation in a small package
- Suitable for automated assembly
- MSL Level 1
- Excellent solderability
- Halogen free

### Schematic



### Reflow Solder Profile



Reflow times: 3 times max.

### Electrical

**Impedance Range:** 500 $\Omega$  to 1500 $\Omega$   
**Tolerance:**  $\pm 25\%$  over entire range  
**Test Frequency:** 100MHz  
**Operating Temp:** -40°C to +85°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  $\pm 5^\circ\text{C}$   
**Flux for lead free:** Rosin 9.5%  
**Dip Time:** 4  $\pm 1\text{S}$   
**Depth:** Completely cover termination

### Test Equipment

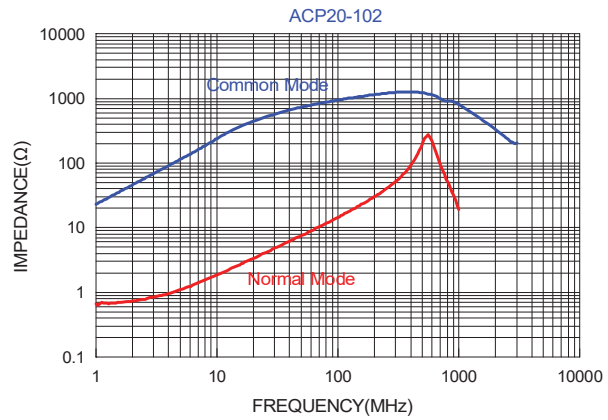
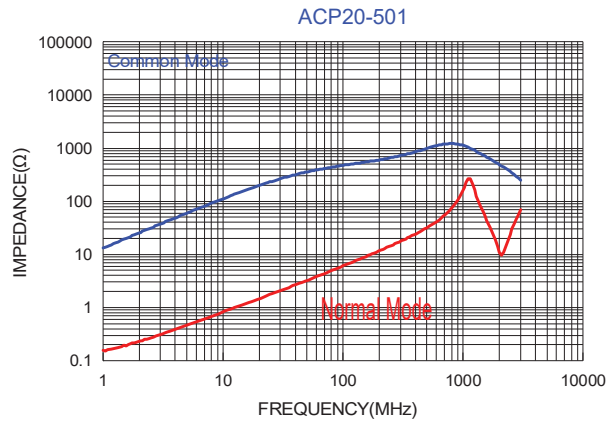
**|Z|:** Agilent 4291A + Agilent 16197A  
**DCR:** Agilent 4338B  
**Insulation Resistance:** Agilent 4339

### Physical

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



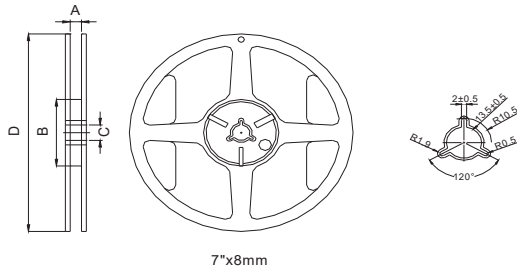
## Typical Performance Curves





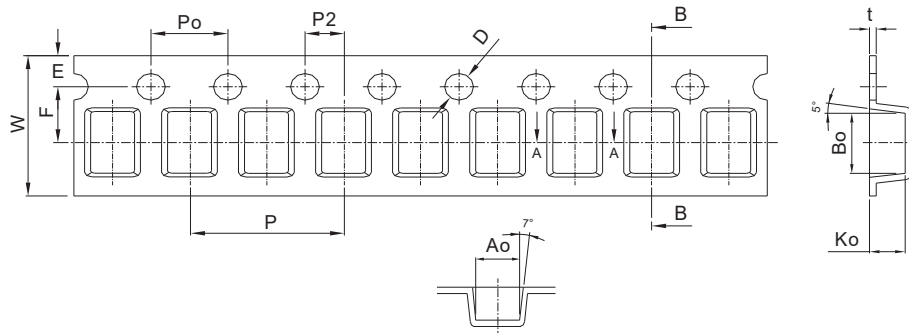
Packaging Information

(1) Reel Dimension



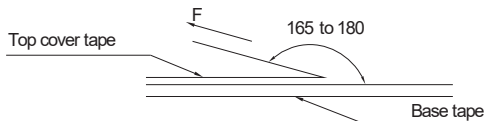
Type	A(mm)	B(mm)	C(mm)	D(mm)
178x8mm	9.0±0.5	60±2.0	13.5±0.5	178±2.0

(2) Tape Dimension



Bo(mm)	Ao(mm)	Ko(mm)	P(mm)	W(mm)	t(mm)	Emm	F(mm)	D(mm)	Po(mm)	P2(mm)
3.72±0.1	2.88±0.1	2.5±0.1	4.0±0.1	8.0±0.1	0.26±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. ACP20 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 form 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.