

**FEATURES**

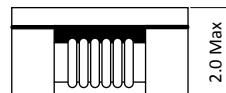
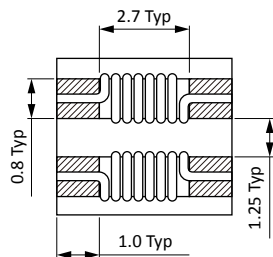
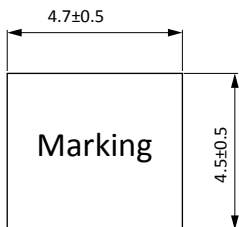
- Chip common mode filter for large current applications
- Optimal for surface mounting with low profile 2.0 mm
- The product series is designed for use up to 2.0A
- Operating temperature -40~+125°C (Including self - temperature rise)
- RoHS Compliant


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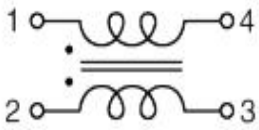
- USB line for personal computers and periphera
- IEEE 1394 line for personal computers, DVC, STB
- LVDS, panel line for liquid display panels, graph card,etc.

**Explanation of Part Number**
**ACM 4520 F- 900 T 32**
**1 2 3 4 5 6**

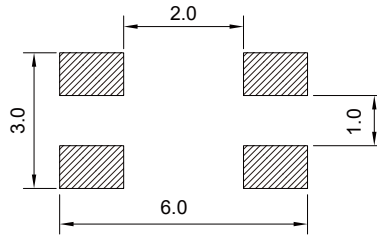
- ◆ 1:Product Series:Wire Wound Chip Common Mode Filters
- ◆ 2:Dimensions:
- ◆ 3: Material Code:Ferrite
- ◆ 4:Common Mode Impedance( $\Omega$ )
- ◆ 5:Packing(Tape & Reel)
- ◆ 6:Rated Current: 32=3200mA

**Shapes and Dimensions [Dimensions in mm]**


### Equivalent circuit



### Land Pattern: [mm]

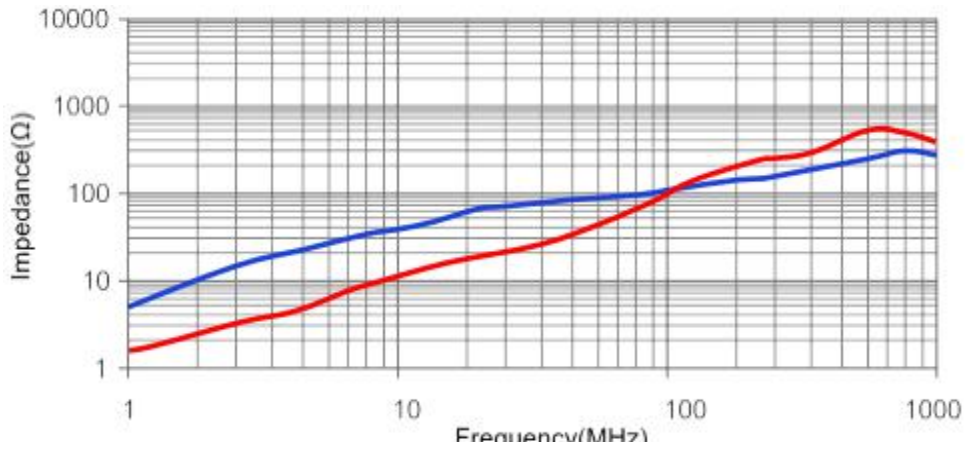


### Electrical Characteristics:

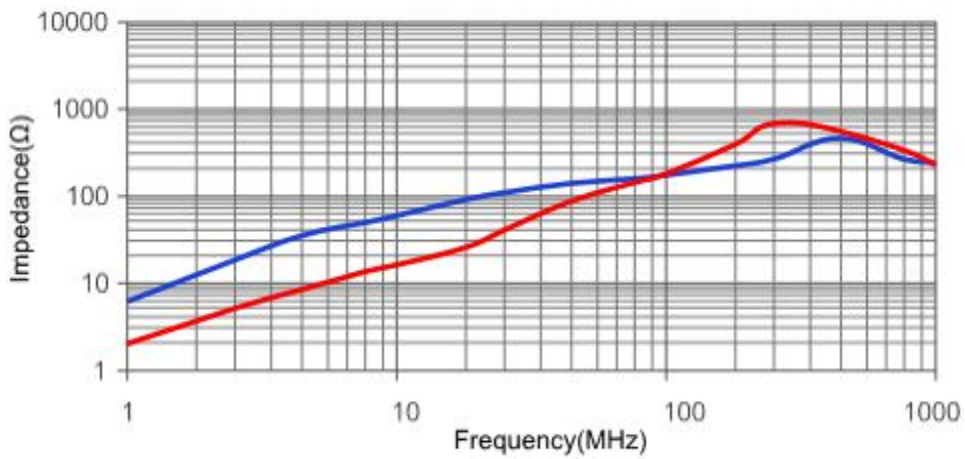
Part Number	Common mode Impedance ( $\Omega$ @100MHz)		DCR (m $\Omega$ ) max.	IDC (A)max.	Rated Volt. (Vdc)max.	IR ( $\Omega$ ) min.	Marking
	60 Min	90 Typ					
ACM4520F-900T32	60 Min	90 Typ	35	3.2	50	10M	900
ACM4520F-151T31	90 Min	150 Typ	40	3.1	50	10M	151
ACM4520F-231T30	180 Min	230 Typ	45	3.0	50	10M	231
ACM4520F-301T30	200 Min	300 Typ	45	3.0	50	10M	301
ACM4520F-401T25	300 Min	420 Typ	50	2.5	50	10M	401
ACM4520F-701T22	500 Min	700 Typ	59	2.2	50	10M	701
ACM4520F-901T21	650 Min	900 Typ	68	2.1	50	10M	901
ACM4520F-102T21	800 Min	1000 Typ	68	2.1	50	10M	102
ACM4520F-122T20	1000 Min	1200 Typ	74	2.0	50	10M	122
ACM4520F-142T19	1200 Min	1400 Typ	81	1.9	50	10M	142

Typical Electrical Characteristics:

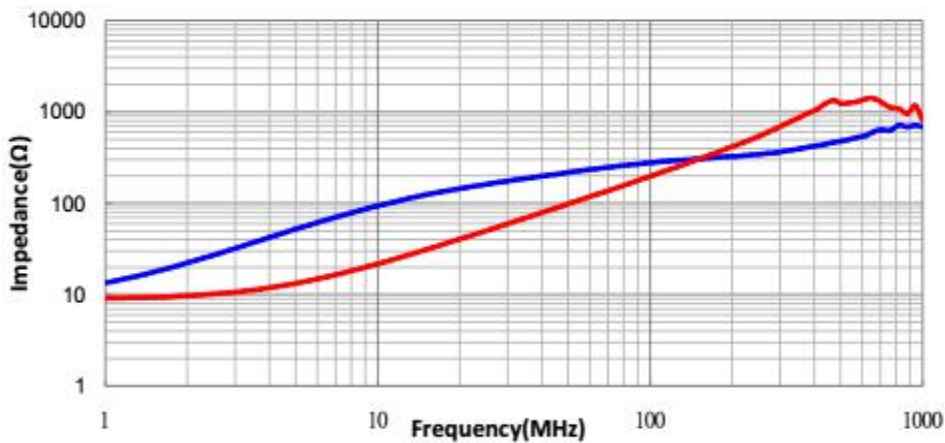
ACM4520F-900T32



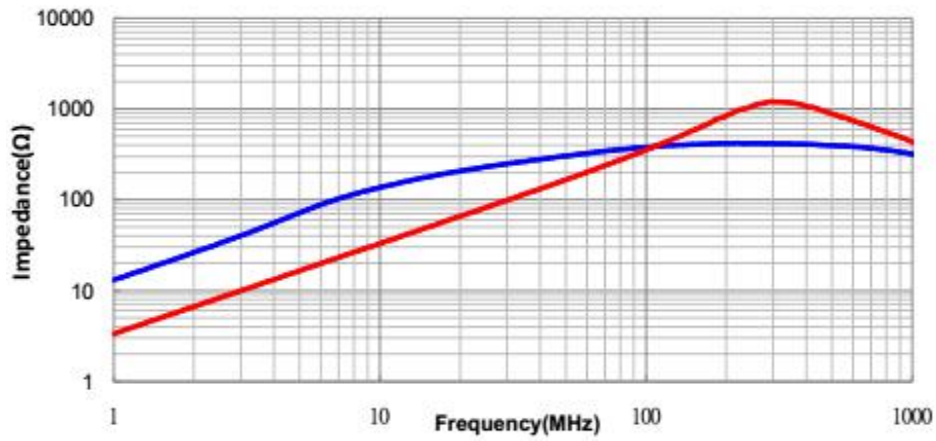
ACM4520F-151T31



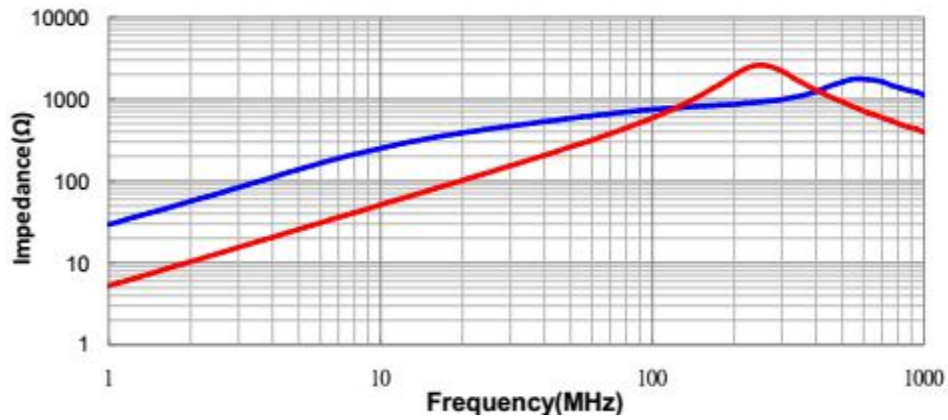
ACM4520F-231T30  
ACM4520F-301T30



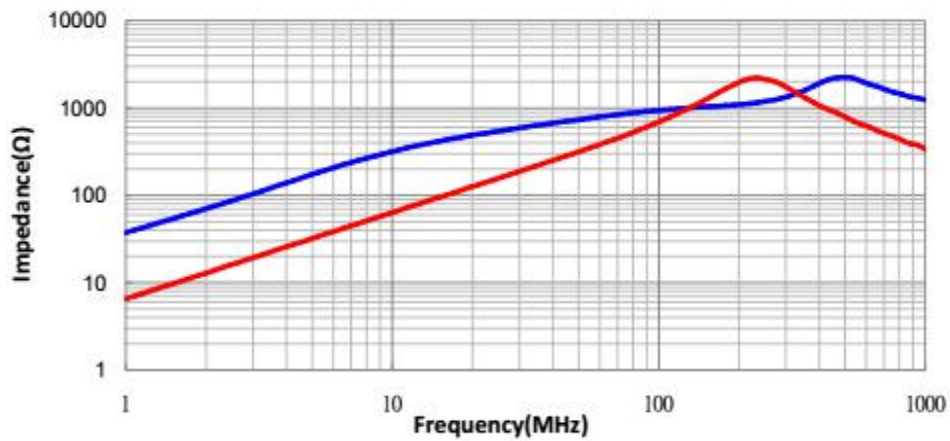
ACM4520F-401T25



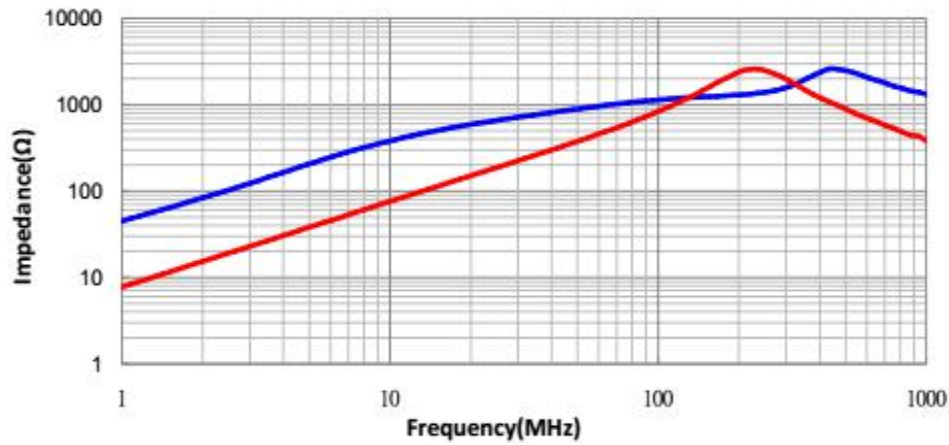
ACM4520F-701T22



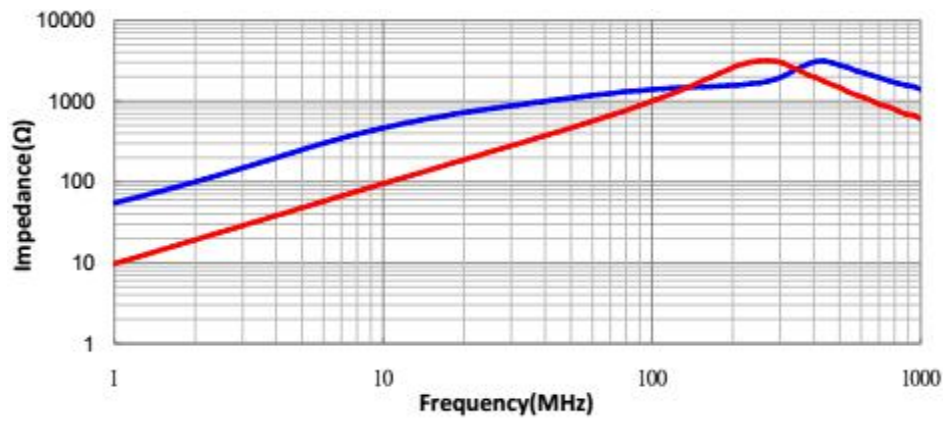
ACM4520F-901T21  
ACM4520F-102T21



ACM4520F-122T20



ACM4520F-142T19



## Reliability Test

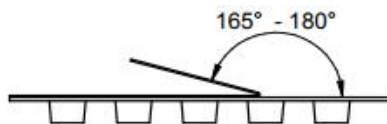
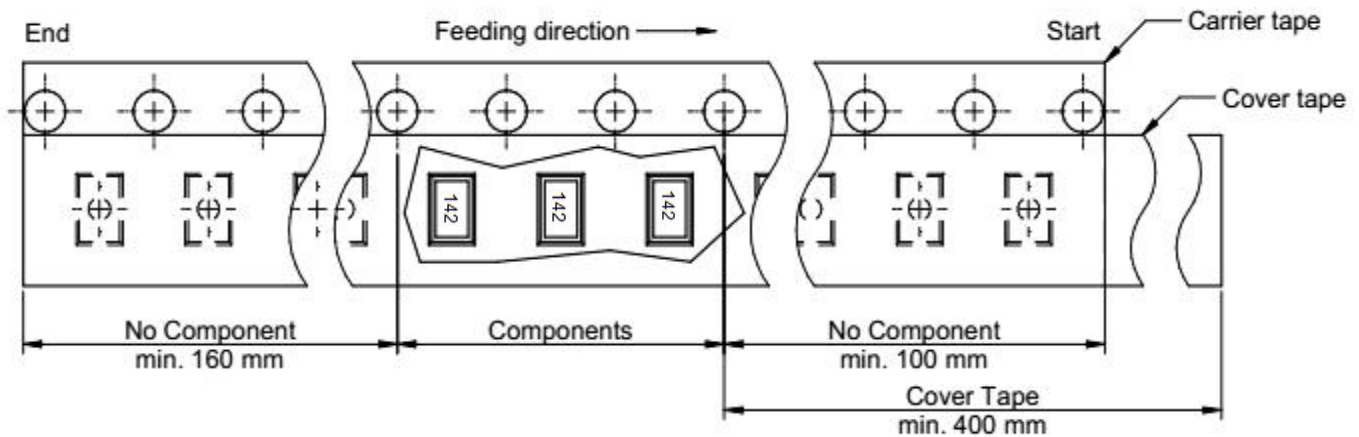
### Mechanical Reliability

ITEM	Specification & Requirement	Method Used
Solderability	The surface of terminal/pin tested shall be covered with new solder by 95%	Solder heat proof: Preheating: 180 ±10°C 90 seconds Soldering: 255 ±5°C for 3 ±1 sec
Shock	Inductance change within ± 5% Without mechanical damage	Drop down with 981m/s <sup>2</sup> (100G) shock Attitude upon a rubber block method shock testing machinem, 3 tests.
Vibration	Inductance change within ± 5% Without mechanical damage	Vibration frequency: 10Hz to 55Hz to 10Hz 60 seconds cycle Vibration time: 2 hours

## Aging Reliability

ITEM	Specification & Requirement	Method Used
Thermal Shock	Inductance change within $\pm 5\%$ Without mechanical damage	-25°C, (30 mins) -> room temp. (5 mins) -> 100°C, (30 mins) -> room temp. (5 mins) 100 cycles
Heat Resistance	Inductance change within $\pm 5\%$ Without mechanical damage	Apply IDC current @ 85°C ambient  Duration: 1000 hrs
Humidity Resistance	Inductance change within $\pm 5\%$ Without mechanical damage	Apply IDC current @ 60°C ambient Humidity: 90~95% Duration: 1000 hrs
Low Temp. Storing	Inductance change within $\pm 5\%$ Without mechanical damage	Storing Temp. -25 $\pm$ 2 °C for total 1,000 +4/-0 hours
High Temp. Storing	Inductance change within $\pm 5\%$ Without mechanical damage	Storing Temp. 100 $\pm$ 2 °C for total 1,000 +4/-0 hours

## Packaging



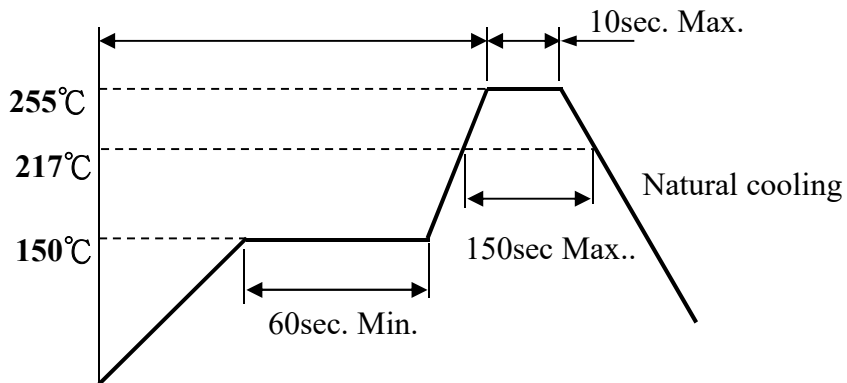
Tape width	Distance	Pull-of force
12 mm	8 mm	10~120g

## Packing Quantity

φ178mm reel T type : 1000 pcs./reel

## Recommended Reflow Pattern

Reflow : until two times



## Iron Soldering

Use a solder iron of less than 30W when soldering, do not allow the soldering iron tip directly touch the ferrite body outside of terminal electrode.

5 seconds max. at 260°C.