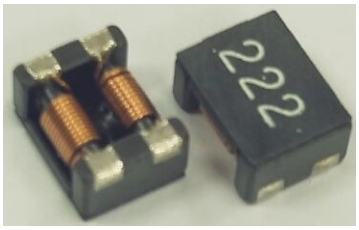
SMD Common Mode Choke - 4520 (Power Line)

BINGRI TECH

Features & Application 2020/1/1

• Chip common mode filter for large current applications

For each series, there is excellent common mode impedance and noise suppression in a compact case.



• Compatible with high-density portable devices, which are always being made smaller and lighter, because the height has been reduced.

•Power line noise countermeasure for various electronic equipment

Noise countermeasure for adapter lines and battery lines orPCs and word processors.

larger electronic equipment such as note book

•Environmental RoHS compliant, halogen free

•Terminations RoHS compliant matte tin over nickel over silver palladium-glass frit.

•Ambient temperature –40°C to +85°C with Irms current.

•Maximum Part Temperature +105°C

•Storage temperature Component: –40°C to +85°C. • Tape and reel packaging: –40°C to +80°C

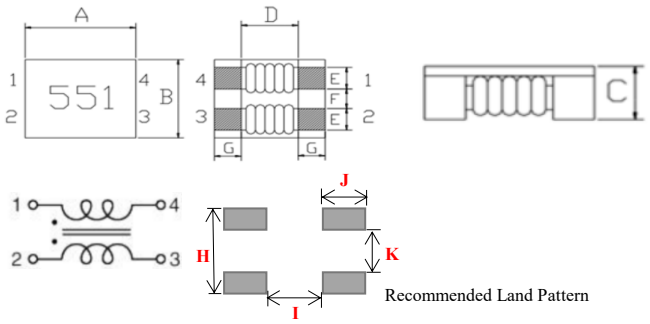
•Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C /85% relative humidity)

★ When ordering, please check part number

Part number	Impedance(Ω) @100MHz min.	typ.	DC Resistance (mΩ) max	Rated Current (A) max.	MARK
ACM4520F900-2AT	60	90	35.0	2.0	900
ACM4520F151-1.9AT	90	150	40.0	1.9	151
ACM4520F231-1.8AT	180	230	45.0	1.8	231
ACM4520F301-1.7AT	200	300	45.0	1.7	301
ACM4520F421-1.5AT	300	420	50.0	1.5	421
ACM4520F701-1.4AT	500	700	59.0	1.4	701
ACM4520F901-1.3AT	650	900	68.0	1.3	901
ACM4520F102-1.3AT	800	1000	68.0	1.3	102
ACM4520F122-1.2AT	1000	1200	74.0	1.2	122
ACM4520F142-1.2AT	1200	1400	81.0	1.2	142

Isolation (Vrms) : 250V. Winding to winding isolation (hipot) tested for one minute.



Recommended Land Pattern

Dimensions (unit : mm)	
A	4.70 ± 0.5
B	4.50 ± 0.5
C	2.0 max
D	2.70 typ
E	0.80 typ
F	1.25 typ
G	1.00 typ
H	2.95 typ
I	3.50 typ
J	1.25 typ
K	1.05 typ

Impedance/Inductance/Q/ LCR Angilent E4991A/4263B
Resistance DC Chroma 16502
Current per winding that causes a 20°C rise from 25°C ambient
Electrical specifications at 25°C

Weight 118 – 141 mg.

Packaging 1000/7〃 reel; Plastic tape: 12 mm wide.

Packaging will different,accroding the various chip size.□

Contact Us	
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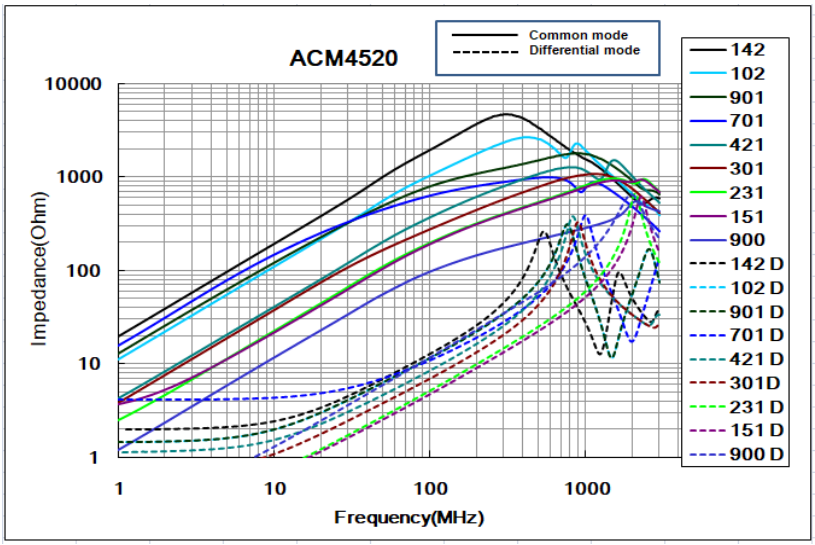
Official Website :
https://www.bing-ri.com.tw/

Typical Impedance vs Frequency

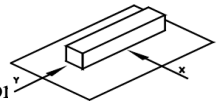
Common Mode & Differential mode



GENERAL CHARACTERISTICS

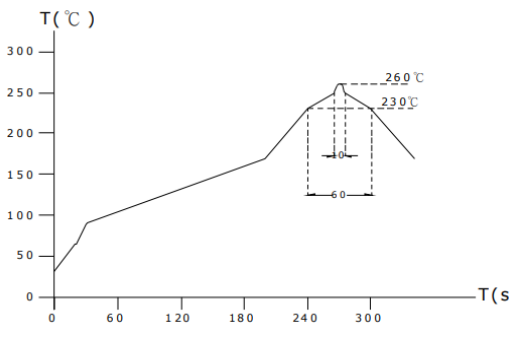
1. Operating temperature range: -40 TO + 125℃(Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 0.8kg Min –4520



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and co
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core
6. Temperature characteristics: Inductance coefficient (0~2,000)x10-6/ (℃ -25~+80). ℃ , inductance deviation within±5.0%, after 96 hours.
7. Humidity characteristics(Moisture Resistance): Inductance deviation within ±5%, after 96 hours in 90~95% relative humidity at 40 ±2 and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within ±5%, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within ±5%, after being dropped once with 981m/s2 (100G) shock attitude upon a rubber block method shock testing machine, in three different
10. Resistance to Soldering Heat: 260 , 10 seconds(See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10 ~ 35 (Generally: 21 ~ 31) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range:-35 ~ 85 , Humidity Range: 50% ~ 95% RH
12. Use components within 12 months. If 12 months or more have elapsed, check soldarability before use.
13. Reflow profile recommend:

Lead-free heat en duran ce test



Lead-free the recommended reflow condition