

Common mode filters For high-speed differential signal line, general differential signal line

DCM2520 type



FEATURES

- Downsized wound type chip common mode filter that maintains required common mode filter characteristics.
Impedance for common mode noise can clear 1000Ω [100MHz], and has excellent EMC suppression.
- Differential mode impedance is suppressed, so there is virtually no affect on high speed signals.
- There is a two-line type and a three-line type, so they can be used for various circuits and noise.
- Operating temperature range: -40 to +85°C

APPLICATION

- Common mode noise countermeasure for high-speed differential signals where influence to the signal is a concern.
- USB line for PCs and peripheral devices.
- IEEE1394 lines and ETHERNET lines for PCs, STBs, etc.
- LCD panel LVDS and Panel Link lines.

PART NUMBER CONSTRUCTION

DCM	2520	-	301	-	3P	-	T	002
Series name	L×W×H dimensions 2.5×2.0×1.2 mm		Impedance (Ω) at 100MHz		Number of lines		Packaging style	Internal code

CHARACTERISTICS SPECIFICATION TABLE

Impedance [100MHz]		DC resistance [per 1 line]		Rated voltage	Insulation resistance	Rated current	Part No.
(Ω) min.	(Ω) typ.	(Ω) max.		(V) max.	(MΩ) min.	(A) max.	
225	300	0.35		20	10	0.4	DCM2520-301-2P-T002
330	500	1.4		20	10	0.15	DCM2520-501-3P-T002
450	600	0.45		20	10	0.3	DCM2520-601-2P-T002
750	1000	0.9		20	10	0.2	DCM2520-102-2P-T002
600	800	1.6		20	10	0.15	DCM2520-801-3P-T002

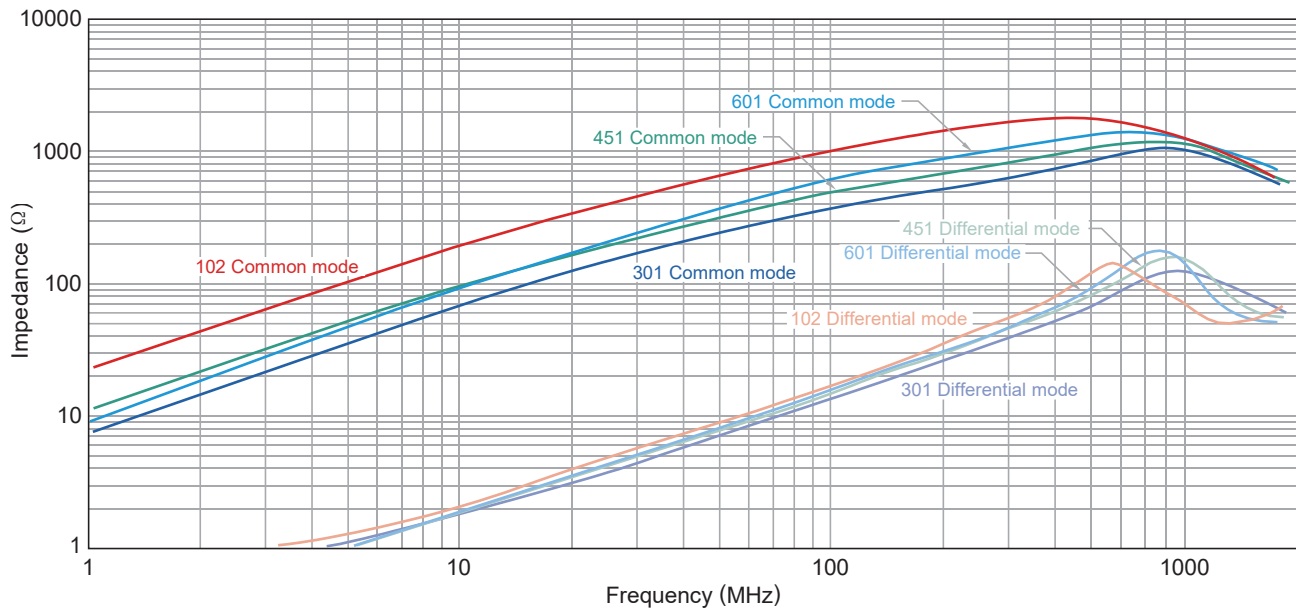
Measurement equipment

Measurement item	Product No.	Manufacturer
Common mode impedance	4991A	Keysight Technologies
DC resistance	4338A	Keysight Technologies
Insulation resistance	4339A	Keysight Technologies

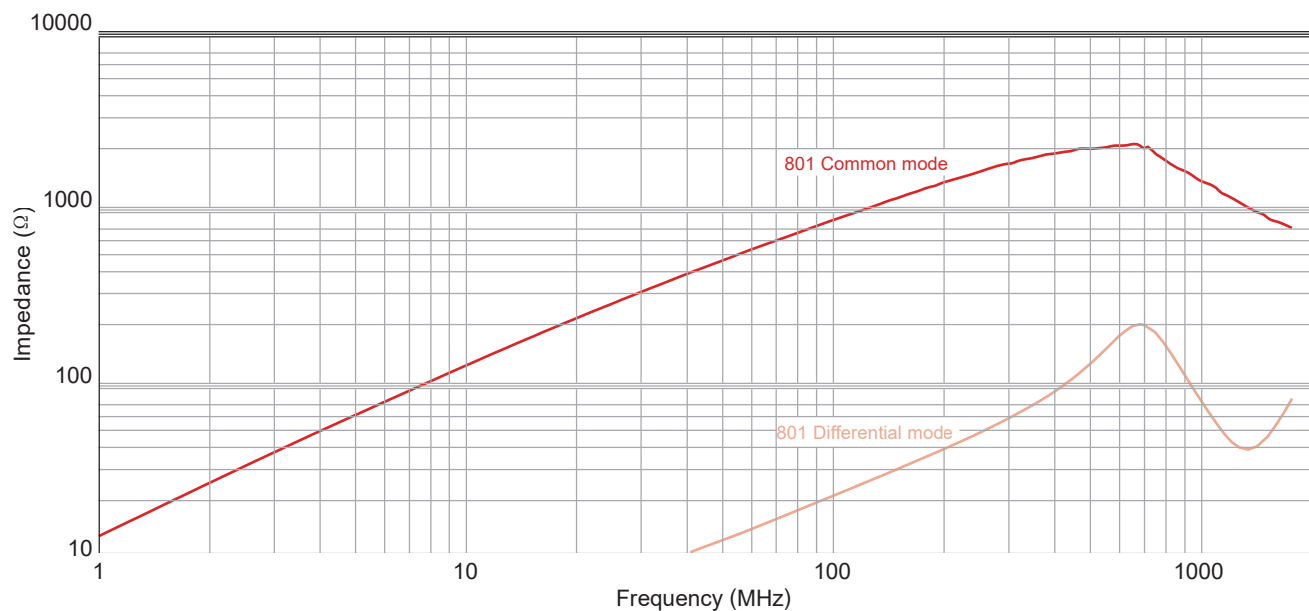
* Equivalent measurement equipment may be used.

IMPEDANCE VS. FREQUENCY CHARACTERISTICS

DCM2520-2P type

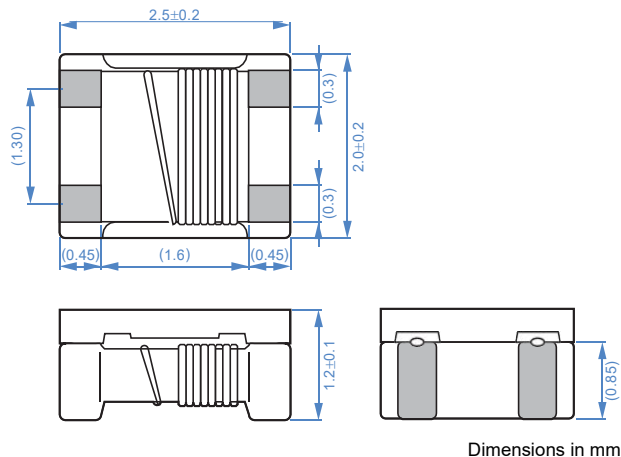


DCM2520-3P type



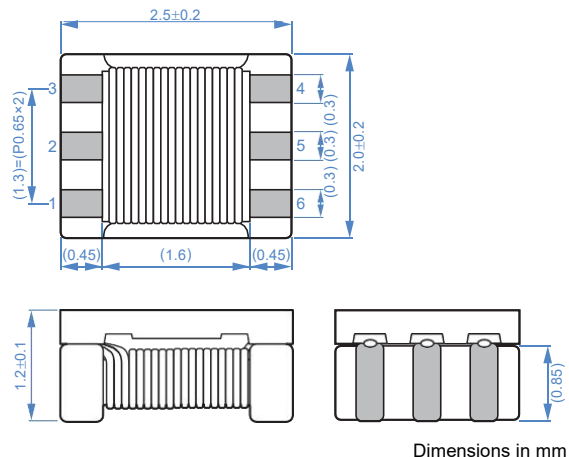
DCM2520-2P type

SHAPE & DIMENSIONS

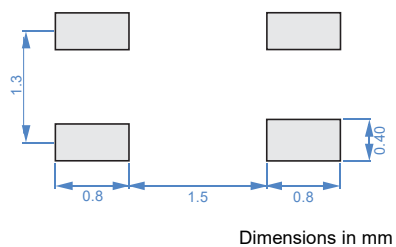


DCM2520-3P type

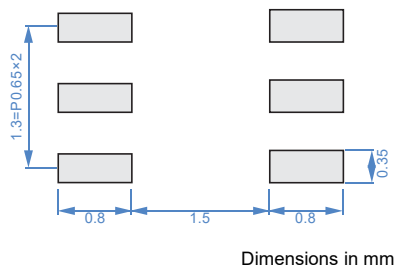
SHAPE & DIMENSIONS



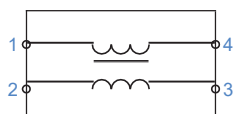
RECOMMENDED LAND PATTERN



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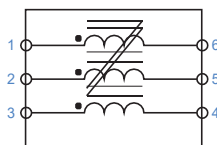


CIRCUIT DIAGRAM



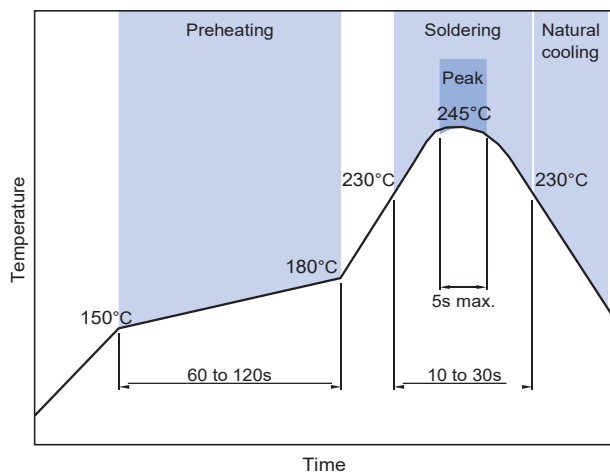
• No polarity

CIRCUIT DIAGRAM



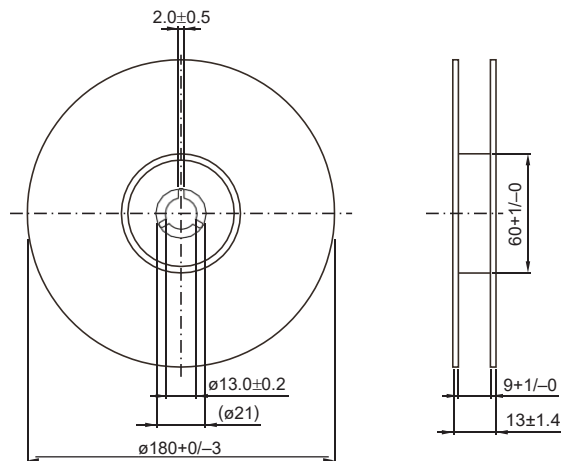
• No polarity

RECOMMENDED REFLOW PROFILE



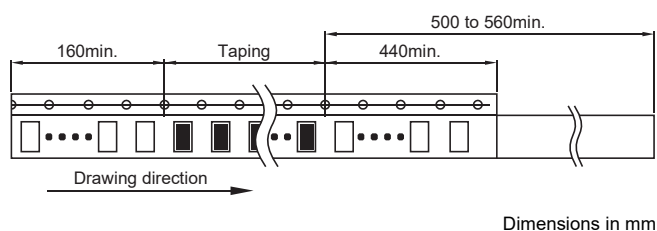
PACKAGING STYLE

REEL DIMENSIONS

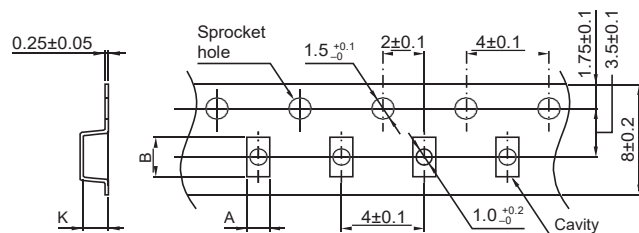


Dimensions in mm

TAPE DIMENSIONS



Dimensions in mm



Dimensions in mm

PACKAGE QUANTITY

Package quantity	2,000 pcs/reel
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TEMPERATURE RANGE, INDIVIDUAL WEIGHT

Operating temperature range	Storage temperature range*	Individual weight
-40 to +85 °C	-40 to +85 °C	25 mg

* The storage temperature range is for after the assembly.

Type	A	B	K
DCM2520	(2.4)	(2.9)	(1.45)