

### FEATURES:

- Wire wound construction provides low DC resistance (as low as 0.142Ω)
- Operation temperature -40°C to +85°C
- High current capabilities (as high as 500mA)
- Good distortion characteristics for high speed signaling in low differential-mode
- Excellent solderability and resistance to soldering heat

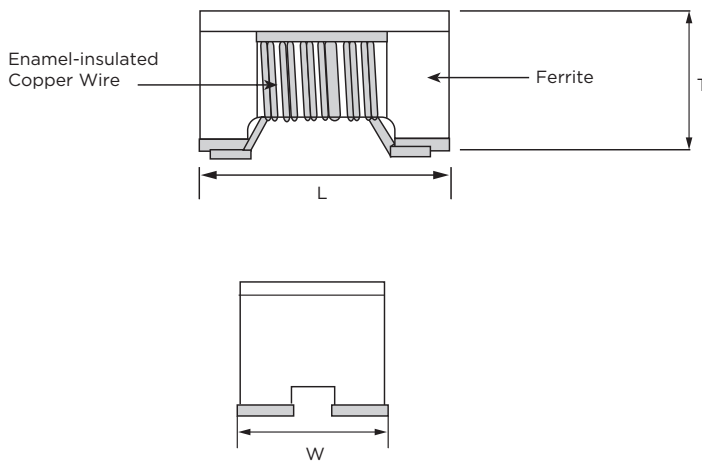


### PART NUMBER STRUCTURE

CMCC	1206	900	M	T
Series	Size	Impedance	Tolerance	Tolerance
	0603	900 = 90Ω	M= ±20%	T = Tape & Reel
	0805	261 = 260Ω	S = ±25%	
	1206	102 = 1000Ω	N = ±30%	

Example P/N: CMCC1206-900MT

### DIMENSIONS

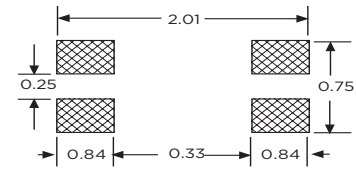
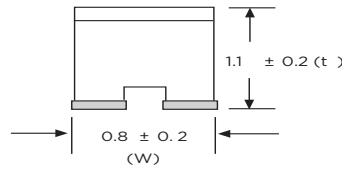
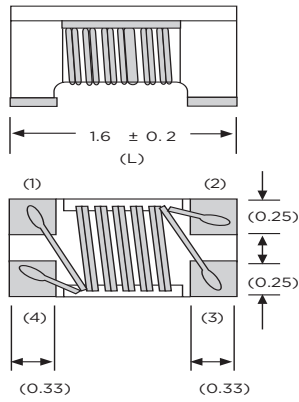


Unit: inches (mm)

SIZE	L	W	T
0603	0.063±0.007 (1.60±0.20)	0.032±0.007 (0.80±0.20)	0.043±0.007 (1.10±0.20)
0805	0.079±0.007 (2.00±0.20)	0.047±0.007 (1.20±0.20)	0.047±0.007 (1.20±0.20)
1206	0.126±0.007 (3.20±0.20)	0.063±0.007 (1.60±0.20)	0.075±0.007 (1.90±0.20)

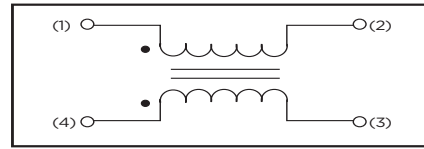
Standard Termination is 100% matte Tin over Nickel.

### ELECTRICAL SPECIFICATIONS AND RANGE



recommended landpattern

Remark: : Electrode  
Unit : mm



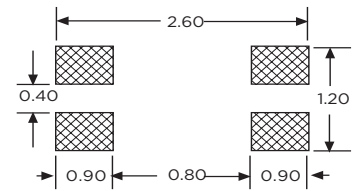
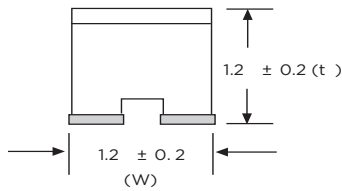
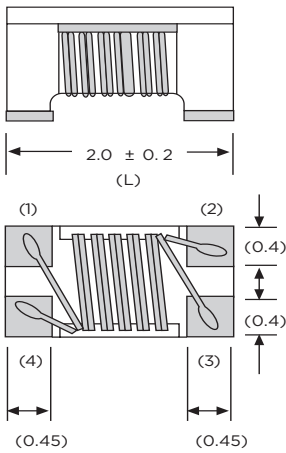
equivalent circuit

#### CMCC 0603 (1608)

IMPEDANCE <sup>(1)</sup> @ 100MHZ (Ω)	RATED VOLTAGE V (DC)	WITHSTANDING VOLTAGE V (DC)	RATED CURRENT <sup>(2)</sup> MAX (MA)	DC RESISTANCE MAX (Ω)	INSULATION RESISTANCE MIN (MΩ)	TOLERANCE (□)	VENKEL PART NUMBER
60	50	125	500	0.142	10	±20%, ±25%, ±30%	CMCC0603600□T
120	50	125	500	0.160	10	±20%, ±25%, ±30%	CMCC0603121□T

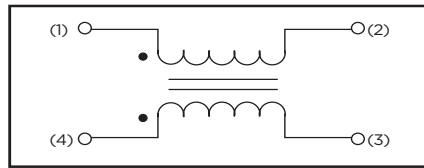
1. Impedance is measured on a HP4287A at 100MHz  
2. For 15°C rise.

### ELECTRICAL SPECIFICATIONS AND RANGE



recommended landpattern

Remark: : Electrode  
Unit : mm



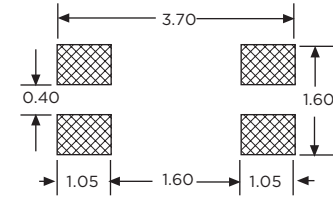
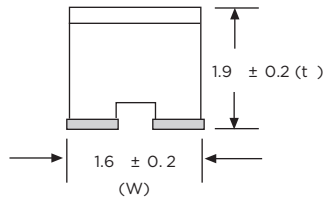
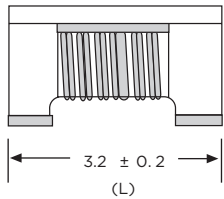
equivalent circuit

#### CMCC 0805 (2012)

IMPEDANCE <sup>(1)</sup> @ 100MHZ (Ω)	RATED VOLTAGE V (DC)	WITHSTANDING VOLTAGE V (DC)	RATED CURRENT <sup>(2)</sup> MAX (MA)	DC RESISTANCE MAX (Ω)	INSULATION RESISTANCE MIN (MΩ)	TOLERANCE (□)	VENKEL PART NUMBER
30	50	125	450	0.20	10	±20%, ±25%, ±30%	CMCC0805300□T
67	50	125	400	0.25	10	±20%, ±25%, ±30%	CMCC0805670□T
90	50	125	330	0.35	10	±20%, ±25%, ±30%	CMCC0805900□T
120	50	125	370	0.30	10	±20%, ±25%, ±30%	CMCC0805121□T
160	50	125	330	0.35	10	±20%, ±25%, ±30%	CMCC0805161□T
180	50	125	330	0.35	10	±20%, ±25%, ±30%	CMCC0805181□T
200	50	125	330	0.35	10	±20%, ±25%, ±30%	CMCC0805201□T
220	50	125	330	0.35	10	±20%, ±25%, ±30%	CMCC0805221□T
260	50	125	300	0.40	10	±20%, ±25%, ±30%	CMCC0805261□T
360	50	125	280	0.40	10	±20%, ±25%, ±30%	CMCC0805361□T
370	50	125	280	0.40	10	±20%, ±25%, ±30%	CMCC0805371□T

1. Impedance is measured on a HP4287A at 100MHz  
2. For 15°C rise.

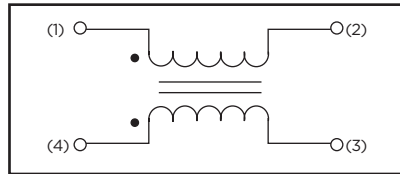
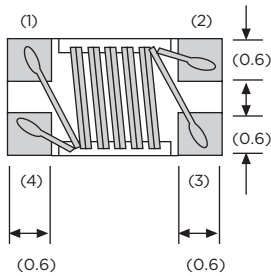
## ELECTRICAL SPECIFICATIONS AND RANGE



recommended landpattern

Remark: : Electrode

Unit: mm



equivalent circuit

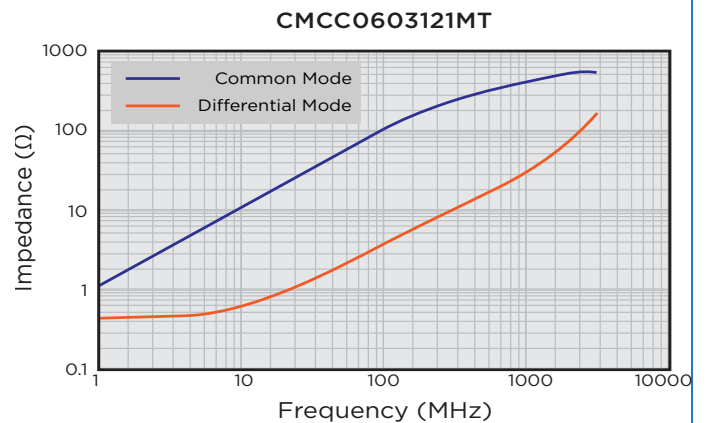
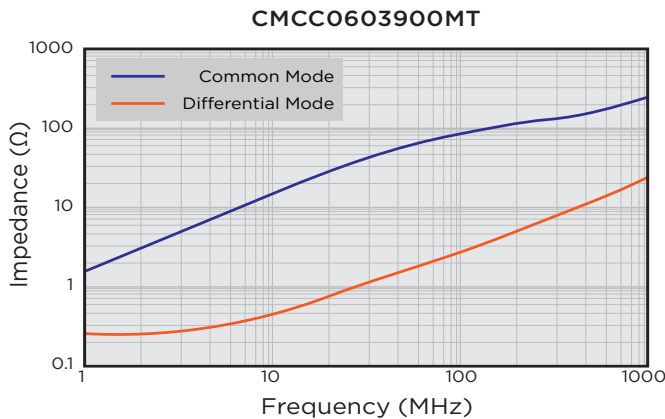
### CMCC 1206 (3216)

IMPEDANCE <sup>(1)</sup> @ 100MHZ (Ω)	RATED VOLTAGE V (DC)	WITHSTANDING VOLTAGE V (DC)	RATED CURRENT <sup>(2)</sup> MAX (MA)	DC RESISTANCE MAX (Ω)	INSULATION RESISTANCE MIN (MΩ)	TOLERANCE (□)	VENKEL PART NUMBER
90	50	125	370	0.30	10	±20%, ±25%, ±30%	CMCC1206900□T
120	50	125	370	0.30	10	±20%, ±25%, ±30%	CMCC1206121□T
160	50	125	340	0.40	10	±20%, ±25%, ±30%	CMCC1206161□T
260	50	125	310	0.50	10	±20%, ±25%, ±30%	CMCC1206261□T
600	50	125	260	0.80	10	±20%, ±25%, ±30%	CMCC1206601□T
1000	50	125	230	1.00	10	±20%, ±25%, ±30%	CMCC1206102□T
2200	50	125	200	1.20	10	±20%, ±25%, ±30%	CMCC1206222□T

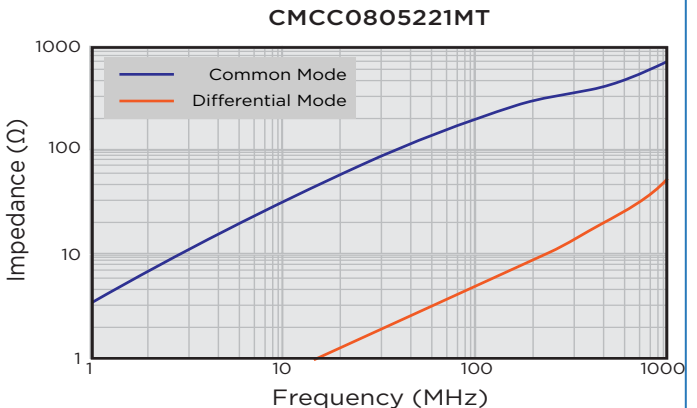
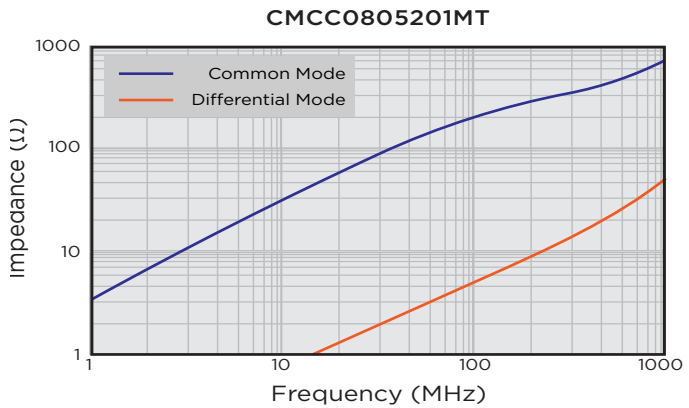
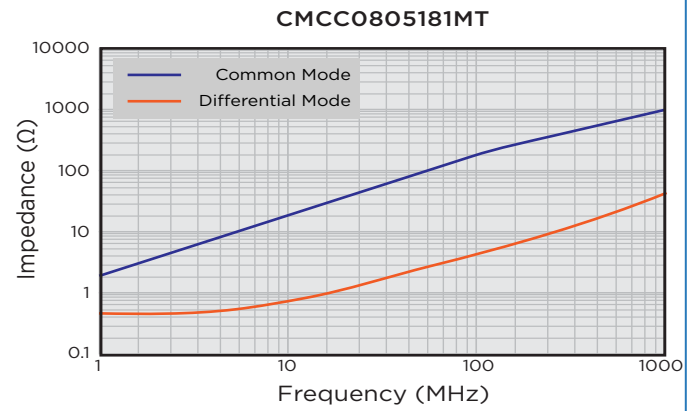
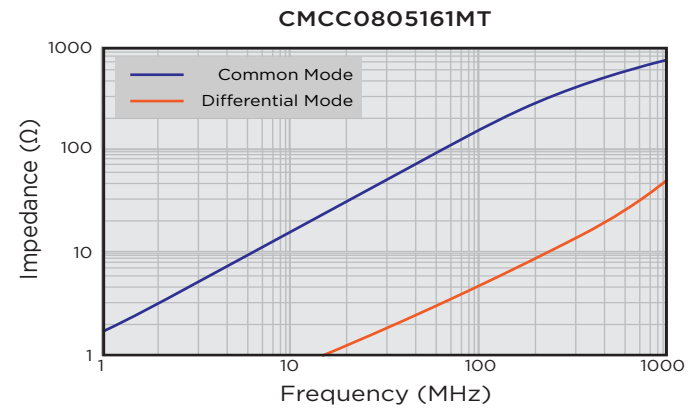
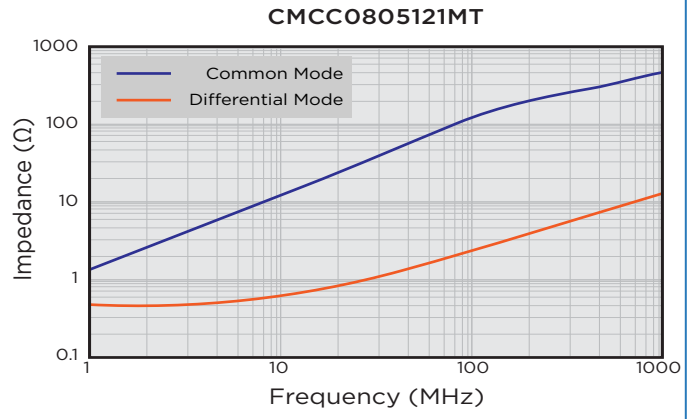
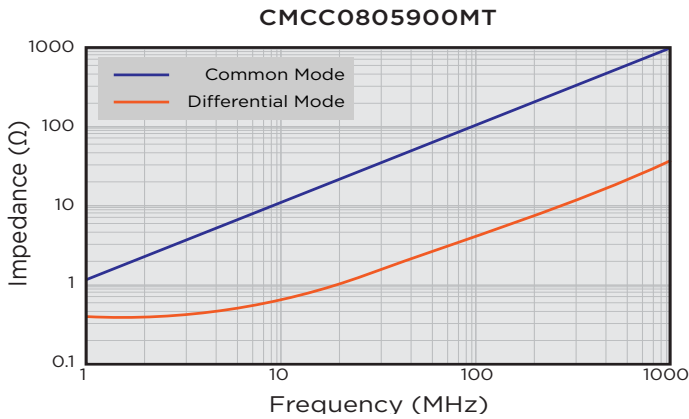
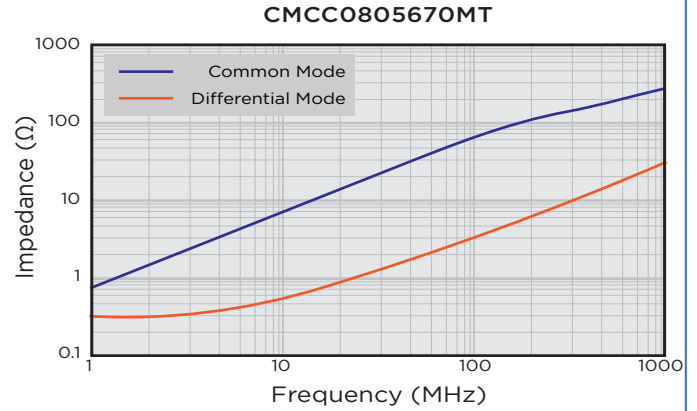
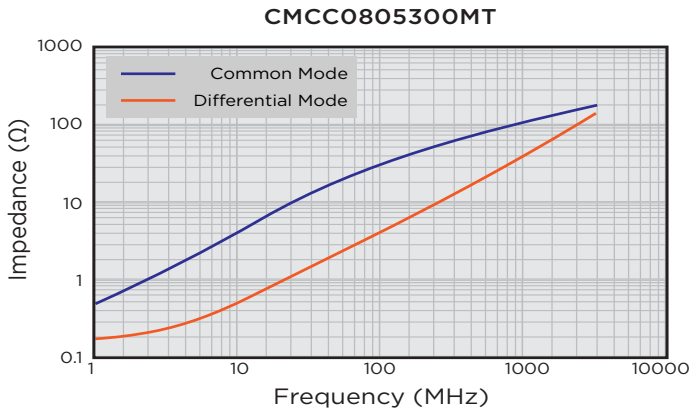
1. Impedance is measured on a HP4287A at 100MHz

2. For 15°C rise.

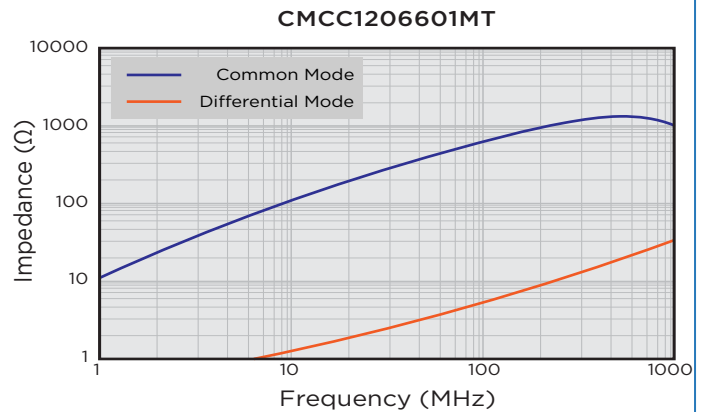
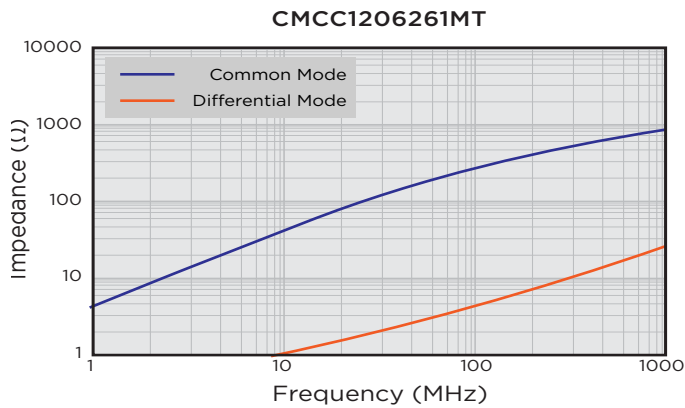
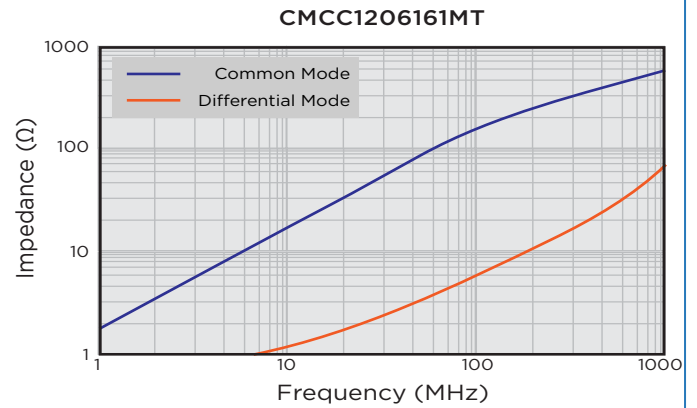
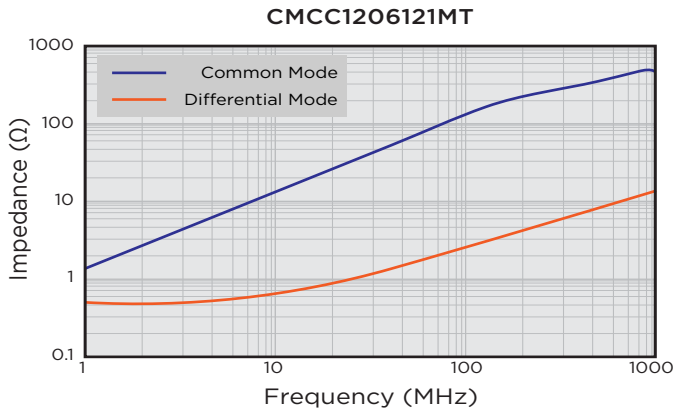
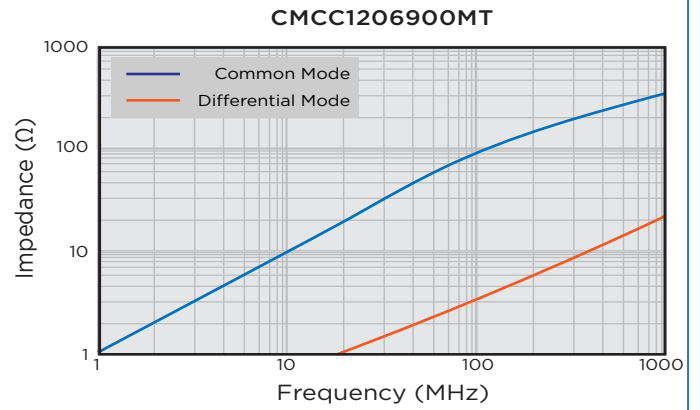
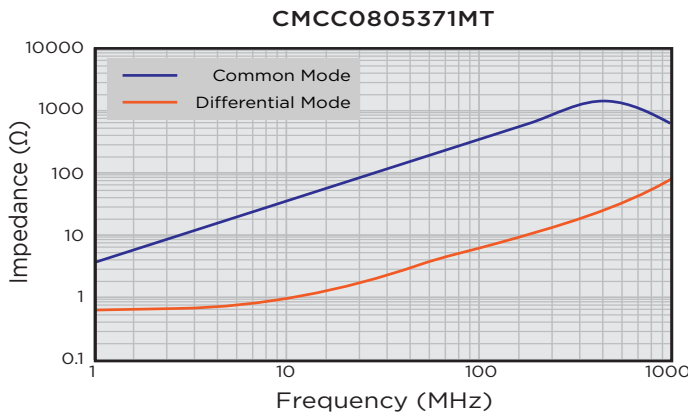
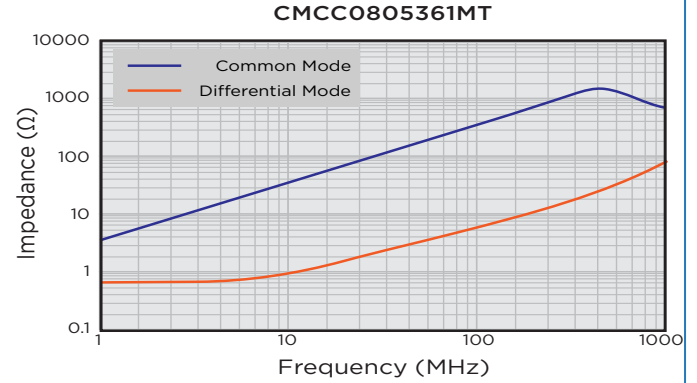
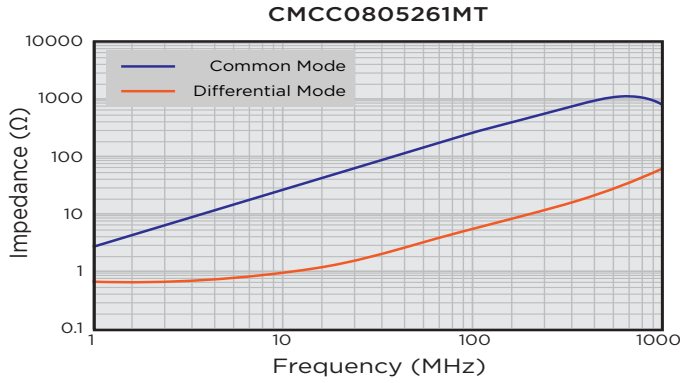
## IMPEDANCE VS FREQUENCY GRAPHS



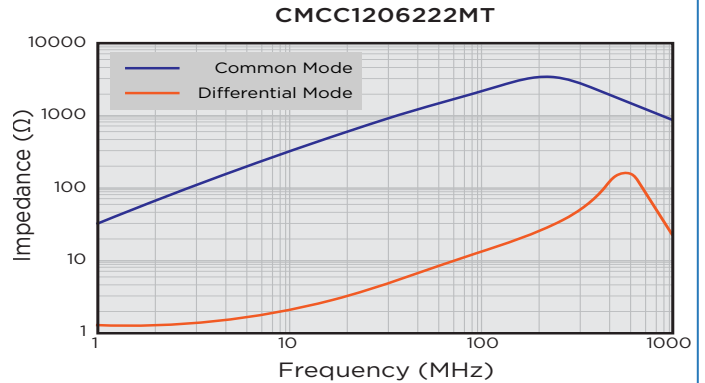
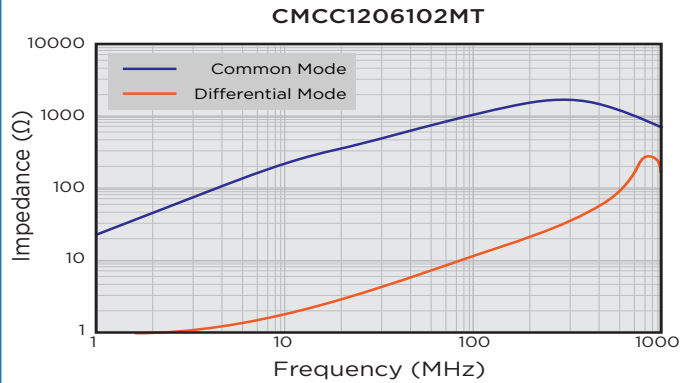
**IMPEDANCE VS FREQUENCY GRAPHS**



**IMPEDANCE VS FREQUENCY GRAPHS**

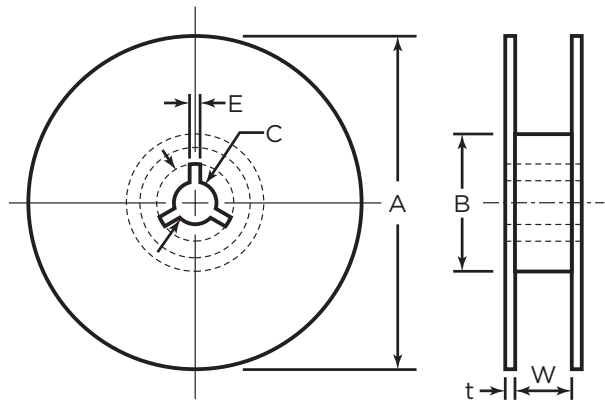


### IMPEDANCE VS FREQUENCY GRAPHS



### TAPING SPECIFICATIONS

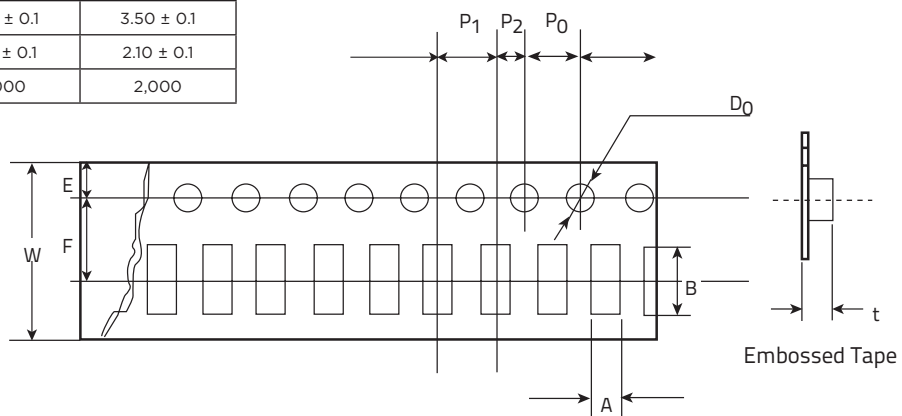
TAPE WIDTH	8MM	12MM
A	178 ± 2	178 ± 2
B	60 ± 1	60 ± 1
C	13.0 ± 0.5	13.0 ± 0.5
E	2.0 ± 0.5	2.0 ± 0.5
W	10.0 ± 1.0	14.0 ± 1.0
t	1.35 ± 0.5	2.1 ± 0.5



### CARRIER TAPE

Unit: mm

SIZE (INCHES)	0603	0805	1206
Tape	Embossed Tape	Embossed Tape	Embossed Tape
W	8.0 ± 0.2	8.0 ± 0.2	8.0 ± 0.2
F	3.5 ± 0.1	3.5 ± 0.1	3.5 ± 0.1
E	1.75 ± 0.1	1.75 ± 0.1	1.75 ± 0.1
P <sub>1</sub>	4.0 ± 0.1	4.0 ± 0.1	4.0 ± 0.1
P <sub>2</sub>	2.0 ± 0.1	2.0 ± 0.1	2.0 ± 0.1
P <sub>0</sub>	4.0 ± 0.1	4.0 ± 0.1	4.0 ± 0.1
D <sub>0</sub>	1.5 ± 0.1	1.5 ± 0.1	1.5 ± 0.1
A	1.65 ± 0.1	1.4 ± 0.1	1.9 ± 0.1
B	1.00 ± 0.1	2.55 ± 0.1	3.50 ± 0.1
t	1.18 ± 0.1	1.35 ± 0.1	2.10 ± 0.1
Qty/Reel	2,000	2,000	2,000



**TAPE & REEL SPECIFICATIONS**

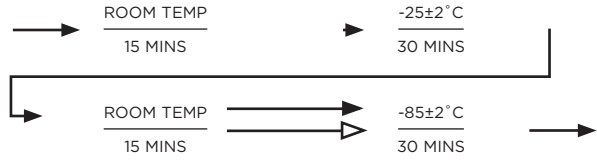
**ELECTRICAL PERFORMANCE TEST**

TEST	REQUIREMENT	TEST METHOD
Impedance	Refer to standard electrical characteristic spec. Component should not be damaged	LCR Meter HP 4291B
DC Resistance		Micro-Ohm meter (GOM-801G)
Withstanding Voltage (VDC)		Test Voltage: 2.5 Times Rated Voltage Testing Time: 60 seconds Charge Current: 0.5mA
Rated Voltage (VDC)		Test Voltage: Rated Voltage Testing Time: 1 to 5 seconds Charge Current: 1mA
Insulation Resistance (I.R.)		Charge Current: 1minute 10M ohm min.

**MECHANICAL PERFORMANCE TEST**

TEST	REQUIREMENT	TEST METHOD
Component Adhesion (Push Test)	Base: 0805≥2 Lbs Cover: 0805≥1 Lbs Base: 1206≥4 Lbs Cover: 1206≥2 Lbs	The component should be soldered (232°C±5°C for 10 sec.) to tinned copper substrate Applied force gauge to the side of component It must withstand force of 2 or 4 pounds without failure of the component.
Drop	Component should not be damaged	Dropping chip by each side and corner. Drop 10 times in total Drop height: 100 cm Drop weight: 125 g
Solderability	The terminal should at least be 90% covered with solder.	The component shall be dipped in a melted solder bath at 245 ±5 for 3 seconds.
Vibration Test (Low Frequency)	Component should not be damaged.	1. Amplitude: 1.5 m/m 2. Frequency: 10-55-10Hz (1min.) 3. Direction: X, Y, Z 4. Duration: 2 Hrs/X, Y, Z

**CLIMATIC TEST**

TEST	REQUIREMENT	TEST METHOD
Low Temperature Storage	Impedance change: Within±20%. Without distinct damage in appearance.	1. Temp: -40 ±2°C 2. Time: 1000±48 Hours 3. Component should be tested after 1hour at room temperature
Thermal Shock		 <p>TOTAL 5 CYCLES</p>
High Temperature Storage		1. Temp: 85±2°C
Humidity		1. Temp: 40±2°C 2. R.H. : 90 - 95% 3. Time: 48±2 Hours
High Temperature Load Life		1. Temp: 85±2°C 2. Time: 96±12 Hours 3. Load: Allowed DC Current
Low Temperature Load Life	1. Temp: -40±2°C 2. Time: 96±12 Hours 3. Load: Allowed DC Current	
Storage Temperature: 15~28°C; Humidity < 80%RHL		