

# Multilayer Chip Common Mode Filter– SDMM Series

Operating temp. : -40°C ~+85°C



## FEATURES

- ◆ Effective for suppressing common mode noise at high frequency
- ◆ Excellent solderability characteristics
- ◆ Small size & low profile
- ◆ Multilayer type SMD component based on LTCC technology

## APPLICATIONS

- ◆ Common mode noise suppression of high speed differential signal lines, such as MIPI, MHL, HDMI in mobile phone, tablet PC, TV etc.

## PRODUCT IDENTIFICATION

1	2	3	4	5	6
SDMM	0806	U	-2	900	T

1 Type	
SDMM	Multilayer Chip Common Mode Filter

2 External Dimensions (L×W) (mm)	
0605	0.65×0.50
0806	0.85×0.65
0906	0.90×0.68

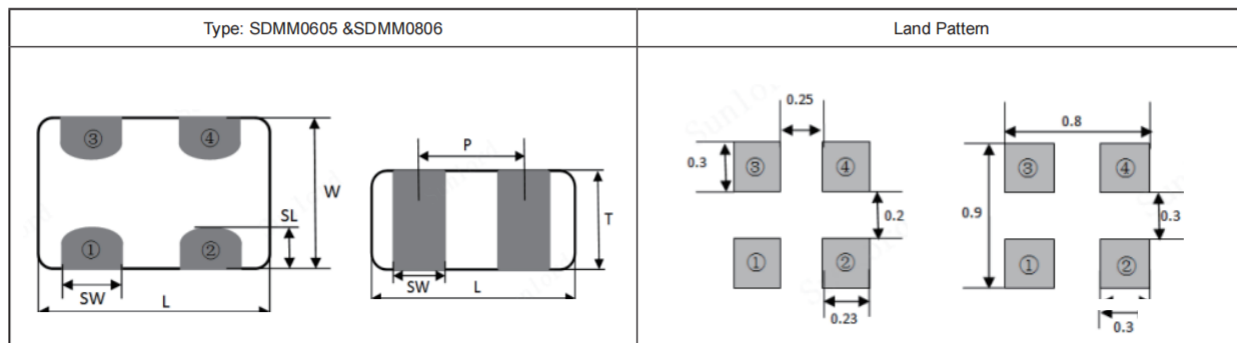
3 Feature Type	
H	for High-Speed Differential Signal Lines
U	for Ultra High Speed Differential Signal Lines

4 Number of Lines	
2	2 Lines
3	3 Lines

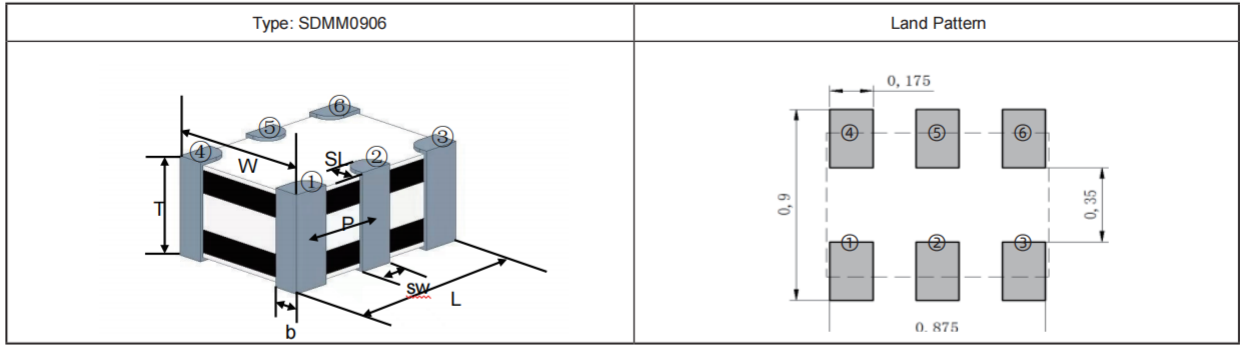
5 Common Mode Impedance (Ω)	
Example	Nominal Value
350	35
900	90

6 Packing	
T	Tape & Reel

## SHAPE DIMENSIONS AND LAND-PATTERN



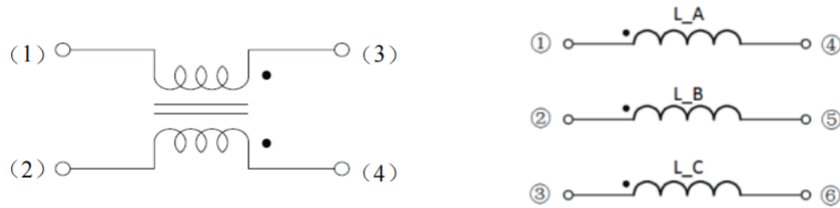
**SHAPE DIMENSIONS AND LAND-PATTERN**



Type	L	W	T	SL	SW	P	b
SDMM0605	0.65±0.05	0.50±0.05	0.30±0.05	0.12+0.1/-0.05	0.15+0.1/-0.05	0.40±0.10	/
SDMM0806	0.85±0.05	0.65±0.05	0.40±0.05	0.20+0.05/-0.10	0.27±0.05	0.50±0.05	/
SDMM0906	0.90±0.05	0.68±0.05	0.40±0.05	0.12±0.10	0.15±0.10	0.35±0.10	SL

Unit: mm

**EQUIVALENT CIRCUIT**



**SPECIFICATIONS SDMM0605H Series**

Part Number	Common Mode Impedance @ 100MHz	Max. DC Resistance	Max. Rated Current	Rated Voltage	Withstand Voltage	Min. Insulation Resistance
Units	Ω	Ω	mA	Volts	Volts	MΩ
Symbol	Z	DCR	I <sub>r</sub>	V <sub>DC</sub>	V <sub>p</sub>	IR
SDMM0605H-2-900T	90±20%	5.0	100	5	12.5	100

**SDMM0906H Series**

Part Number	Common Mode Impedance @ 100MHz	Max. DC Resistance	Max. Rated Current	Withstand Voltage	Min. Insulation Resistance
Units	Ω	Ω	mA	Volts	MΩ
Symbol	Z	DCR	I <sub>r</sub>	V <sub>p</sub>	IR
SDMM0906H-3-300T	30±20%	4.0	20	12.5	100

**SDMM0605U Series**

Part Number	Common Mode Impedance @ 100MHz	Max. DC Resistance	Max. Rated Current	Rated Voltage	Withstand Voltage	Min. Insulation Resistance
Units	Ω	Ω	mA	Volts	Volts	MΩ
Symbol	Z	DCR	I <sub>r</sub>	V <sub>DC</sub>	V <sub>p</sub>	IR
SDMM0605U-2-120T	12±5	2.5	50	5	12.5	100
SDMM0605U-2-250T	25±20%	3.5	50	5	12.5	100

**SPECIFICATIONS** SDMM0806U Series

Part Number	Common Mode Impedance @ 100MHz	Max. DC Resistance	Max. Rated Current	Min. Insulation Resistance	Cutoff Frequency (typ.)
Units	$\Omega$	$\Omega$	mA	M $\Omega$	GHz
Symbol	Z	DCR	I <sub>r</sub>	IR	f <sub>0</sub>
SDMM0806U-2-120T	12±5	2.5	130	100	>8
SDMM0806U-2-350T	35±20%	3.5	100	100	>6
SDMM0806U-2-470T	47±20%	4.0	100	100	6
SDMM0806U-2-900T	90±20%	4.5	100	100	3.5

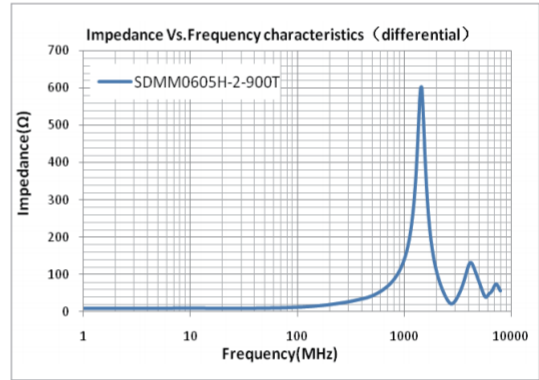
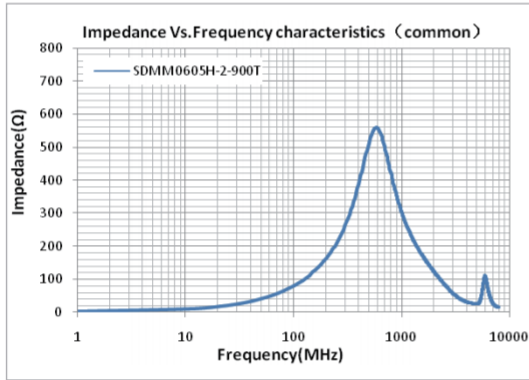
Note: Absolute maximum long term direct-current voltage between D+ and D-of differential lines: DC 1.5V  
SDMM0806U-J01 Series

Part Number	Common Mode Impedance @ 100MHz	Max. DC Resistance	Max. Rated Current	Direct Current Volts	Withstand Voltage	Min. Insulation Resistance
Units	$\Omega$	$\Omega$	mA	Volts	Volts	M $\Omega$
Symbol	Z	DCR	I <sub>r</sub>	V <sub>dcc</sub> *	V <sub>p</sub>	IR
SDMM0806U-2-120TJ01	12±5	2.5	130	1.5	12.5	100
SDMM0806U-2-900TJ01	90±20%	4.5	100	1.5	12.5	100

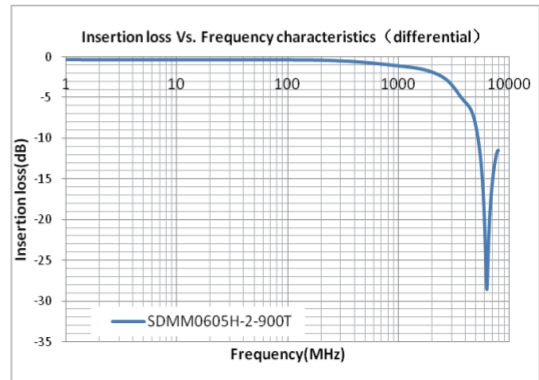
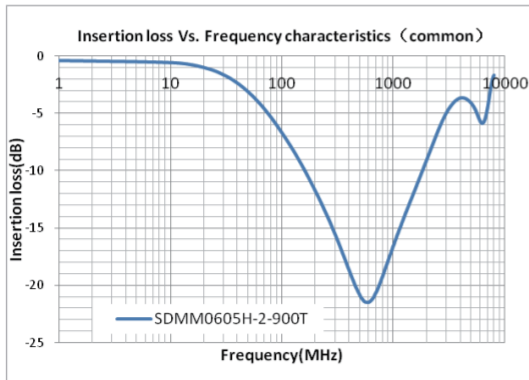
\*Note: V<sub>dcc</sub> is a long term direct-current voltage difference which between D+ and D- of differential lines.

**ELECTRICAL CHARACTERISTICS**

SDMM0605H Series

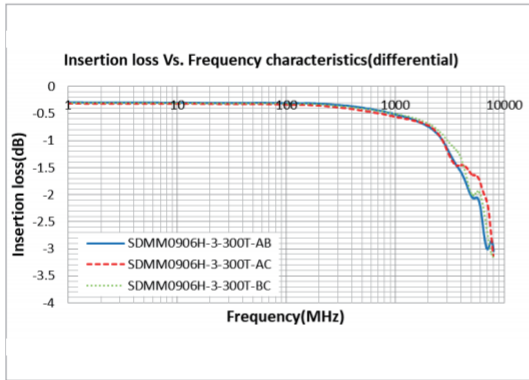
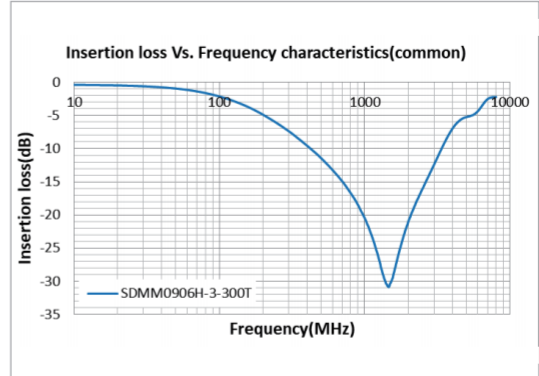
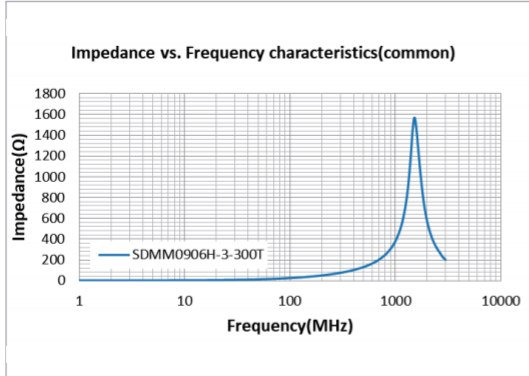


SDMM0605H Series

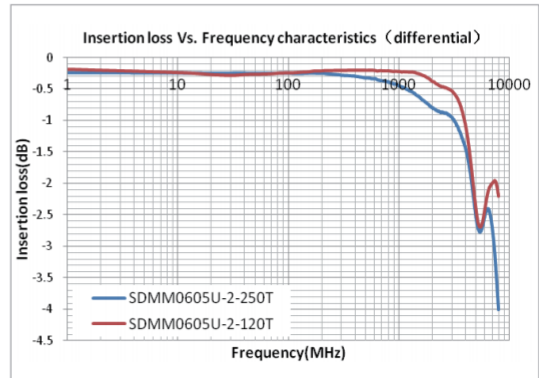
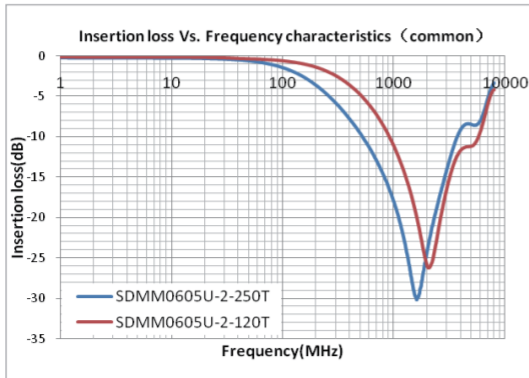
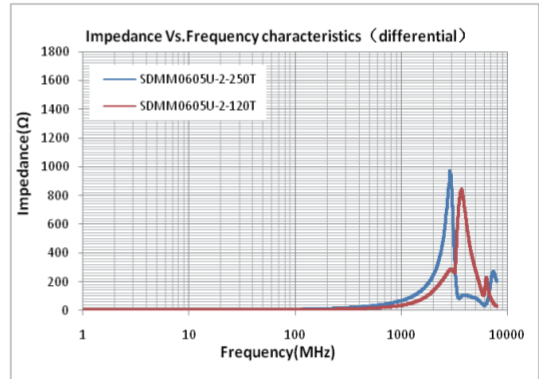
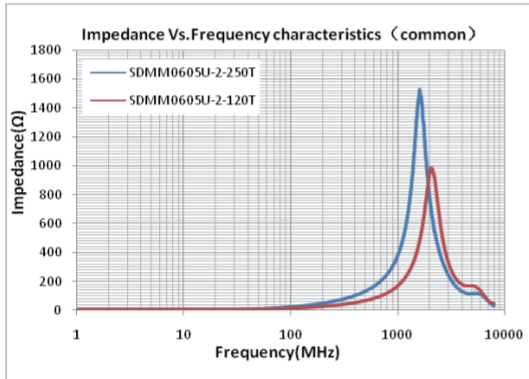


**ELECTRICAL CHARACTERISTICS**

**SDMM0906H Series**

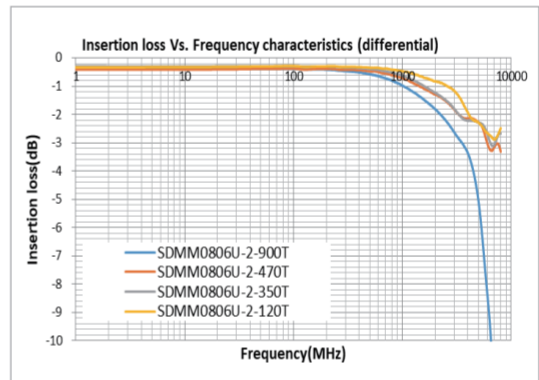
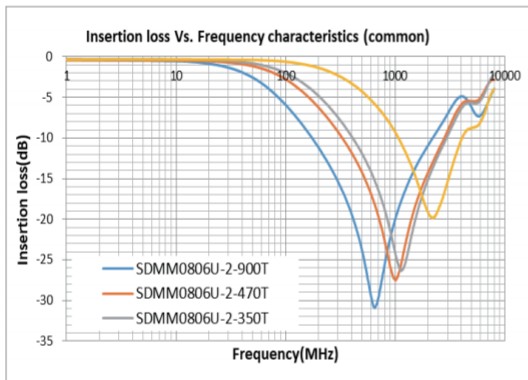
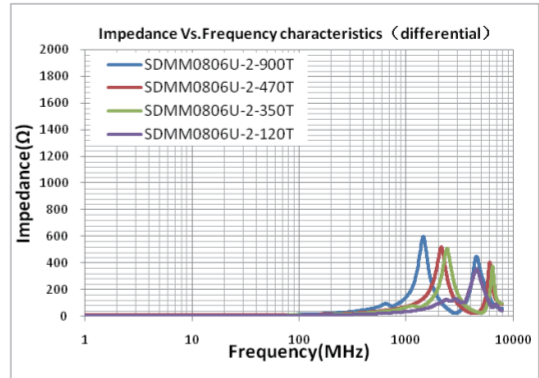
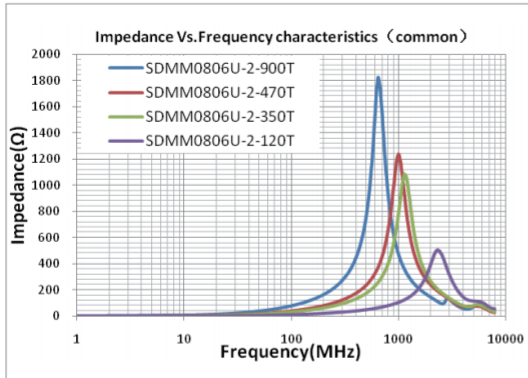


**SDMM0605U Series**



**ELECTRICAL CHARACTERISTICS**

**SDMM0806U Series**



**SDMM0806U\_J01 Series**

