

Flexible Ferrite Sheets For NFC & Wireless Charging

MHLL Series



FEATURES Rohs ®





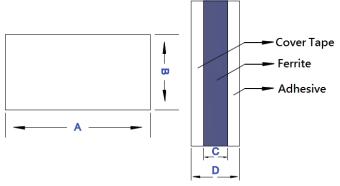
- Flexible ferrite sheets for 13.56 MHz NFC, RFID application & wireless charging application
- Made by thin, high permeability sintered ferrite with PET film and adhesive tape
- Standard ferrite layer thickness 0.05mm, 0.1mm and 0.2mm
- Custom size or thickness available upon request
- Operating temperature -40 $^{\circ}$ C to 85 $^{\circ}$ C
- RoHS compliant

APPLICATIONS

- NFC antenna for mobile phones
- NFC antenna for automobile
- NFC or RFID antenna for security & access control system
- Wireless charging for mobile phones and battery powered handheld electronic devices
- NFC or RFID read/write devices, improved read distance
- EMI suppression for IC or IC circuitry

SHAPES AND DIMENSIONS

PART	A mm	B mm	C mm	D mm MAX	
NUMBER	(inches)	(inches)	(inches)	(inches)	
MHLL5040-000	50	40	0.20	0.35	
MITEL3040-000	(1.969)	(1.575)	(0.008)	(0.014)	
MHLL5040-200	50	40	0.10	0.20	
IVITLLSU4U-2UU	(1.969)	(1.575)	(0.004)	(800.0)	
MHLL6060-300	60	60	0.05	0.09	
MULTOOO0-200	(2.362)	(2.362)	(0.002)	(0.004)	
MUU 12060 000	120	60	0.20	0.35	
MHLL12060-000	(4.724)	(2.362)	(0.008)	(0.014)	
MUU 12060 200	120	60	0.10	0.20	
MHLL12060-200	(4.724)	(2.362)	(0.004)	(0.008)	



PART NUMBER SYSTEM EXAMPLE

000 MHLL 12060 Material Code Part Size Code Thickness Code Catalog or Custom Information

USA: +1.423.308.1690 Europe: +42.0.4885.7511.1 Asia: +86.757.2563.8860

MCP-DS-MHLL SHEET REV1.2 0814



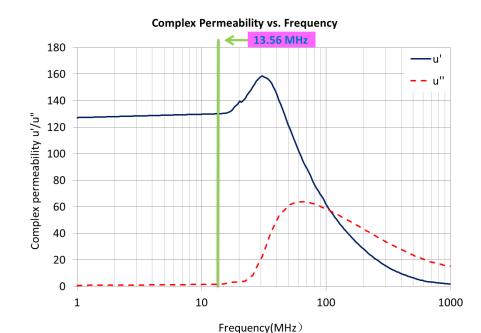
Flexible Ferrite Sheets For NFC & Wireless Charging

MHLL Series

MATERIAL SPECIFICATIONS

Property	MHLL Series
Real Permeability, μ' @13.56MHz, 0.1V	130 ± 20%
Imaginary Permeability, μ"@13.56MHz, 0.1V	5 max
Operating Temperature, °C	-40°C ~ +85°C

TYPICAL ELECTRICAL CHARACTERISTICS





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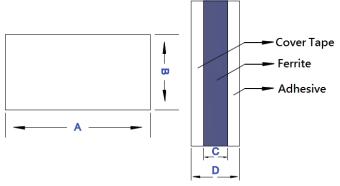
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WI3LL3040-000	(1.969)	(1.575)	(0.008)	(0.014)	
MSLL5040-200	50	40	0.10	0.20	
W3LL3040-200	(1.969)	(1.575)	(0.004)	(800.0)	
MSLL6060-300	60	60	0.05	0.09	
M2FF0000-200	(2.362)	(2.362)	(0.002)	(0.004)	
MCII 12060 000	120	60	0.20	0.35	
MSLL12060-000	(4.724)	(2.362)	(0.008)	(0.014)	
MCII 12060 200	120	60	0.10	0.20	
MSLL12060-200	(4.724)	(2.362)	(0.004)	(0.008)	



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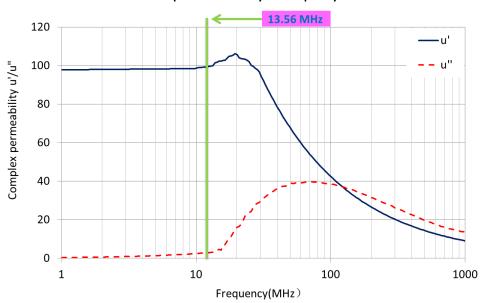
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TYPICAL ELECTRICAL CHARACTERISTICS

Complex Permeability vs. Frequency





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MULL Series



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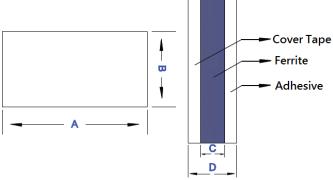
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MIII 6060 200	60	60	0.05	0.09	
MULL6060-300	(2.362)	(2.362)	(0.002)	(0.004)	
MUU 12000 000	120	60	0.20	0.35	
MULL12060-000	(4.724)	(2.362)	(0.008)	(0.014)	
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PART NUMBER SYSTEM EXAMPLE

MULL	12060	-	000	
Material Code	Part Size Code		Thickness Code	
			Catalog or Custom Information	



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