COIL SPECIFICATION

CUSTOMER		**PART NO.**	
PART NAME	**DATA SHEET**	**DATE**	
		SPEC (TYPE)	MNL-201212S-SERIES

■ PRODUCT IDENTIFICATION

① ② ③ ④ ⑤

MNL-201212S -XXX K

① Product Code

② Dimensions Code

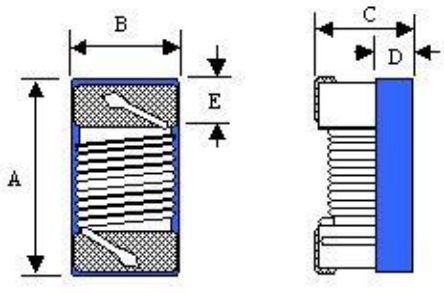
③ Signal Material

④ Inductance Code

⑤ Tolerance Code

Code	Tolerance
K	±10%
M	±20%

■ **SHAPE&DIMENSIOM** (mm)



A	**2.40Max.**
B	**1.60Max.**
C	**1.40Max.**
D	**0.51Typ.**
E	**0.44±0.1**

■ **ELECTRICAL REQUIREMENTS**

*HP 4291A LCR METER

*HP 4285A LCR METER

*ZENTECH 502 AC LOW-OHM METER

APPROVED BY	CHECKED BY	DRAWN BY

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PART NAME	**DATA SHEET**	**DATE**	
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PART NO	Inductance	Frequency	Quality	Frequency	SRF	DCR	Rated current
	(μH)	(MHz)	Min.	(MHz)	(MHz)Min.	(Ω) Max.	(mA) Max.
MNL-201212S-R47	0.47	25.2	30	100	570	0.54	420
MNL-201212S-R56	0.56	25.2	30	100	560	0.64	400
MNL-201212S-R68	0.68	25.2	30	100	480	0.68	350
MNL-201212S-R82	0.82	25.2	30	100	449	0.77	325
MNL-201212S-1R0	1.00	25.2	30	100	394	0.86	300
MNL-201212S-1R2	1.20	25.2	25	100	297	0.97	260
MNL-201212S-1R5	1.50	25.2	25	25.2	206	1.08	250
MNL-201212S-1R8	1.80	25.2	25	25.2	177	1.18	230
MNL-201212S-2R2	2.20	25.2	20	25.2	141	1.32	220
MNL-201212S-2R7	2.70	25.2	20	25.2	128	1.42	210
MNL-201212S-3R3	3.30	25.2	15	25.2	110	1.73	200
MNL-201212S-3R9	3.90	25.2	15	25.2	103	1.72	195
MNL-201212S-4R7	4.70	25.2	15	25.2	98	1.87	185
MNL-201212S-5R6	5.60	7.96	15	7.96	96	2.18	180
MNL-201212S-6R8	6.80	7.96	15	7.96	82	2.90	175
MNL-201212S-8R2	8.20	7.96	15	7.96	64	3.31	140
MNL-201212S-100	10.0	7.96	15	7.96	56	3.72	115

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COIL SPECIFICATION

CUSTOMER		**PART NO.**	
PART NAME	**MECHANICAL PERFORMANCE**	**DATE**	
		SPEC (TYPE)	MNL-201212S-SERIES

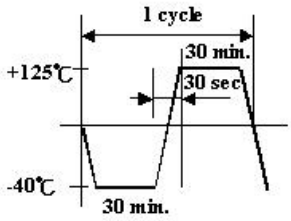
■Reliability Test

Item	Specifications	Test conditions
Solderability	The metalized area must have 90% minimum solder coverage.	Dip pads in flux and dip in solder pot (63 Sn/37 Pb or 96.5 Sn/3.5 Ag solder) at 232°C ±5°C.
Resistance to Soldering heat	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be reflowed onto a PC board using 96.5 Sn/3.5 Ag or 63 Sn/37 Pb solder paste. Solder process shall be at a maximum temperature of 260°C. For 63 Sn/37 Pb solder paste: >183°C for 120 seconds. For 96.5 Sn/3.5 Ag solder paste:>217°C for 90 seconds
Vibration	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to temperature 85±2℃ for 500±12 hours. Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.
Static Humidity	Inductors must not have a shorted or Open winding.	Inductors shall be subjected to temperature 85±2℃ and 90 to 95%RH. for ten 24-hours. Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.
Component Abhesion (push test)	Inductors shall be subjected to 0.9Kg	Inductors shall be reflow soldered (232°C ±5°C for 10 second) to a tinned copper substrate. A force gauge shall be applied to the side of the component. The device must withstand the stated force without a failure of the termination.

COIL SPECIFICATION

CUSTOMER		**PART NO.**	
PART NAME	**MECHANICAL PERFORMANCE**	**DATE**	
		SPEC (TYPE)	MNL-201212S-SERIES

■Reliability Test

Item	Specifications	Test conditions
Low Temperature storage	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to temperature -40±2℃ for 48±12 hours. Measure the test items after leaving the inductors at room temperature and humidity for 1 to 2 hours.
Resistance to solvent	There must be no case deformation, change in dimensions, or obliteration of marking.	Inductors must withstand 6 minutes of alcohol or water.
Thermal shock	There must be no case deformation or change in dimensions. Inductance must not change more than the stated tolerance.	Inductors shall be subjected to 10 cycles to the the following temperature cycle:  Measure the test items after leaving the inductors at room temperature and humidity for 2 hours.

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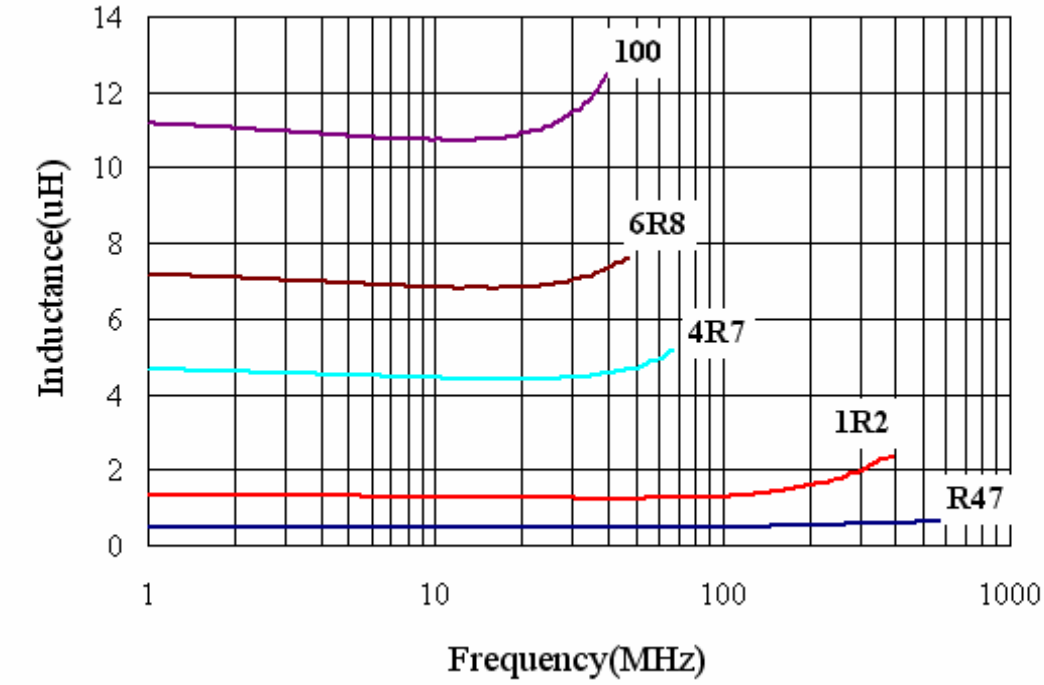
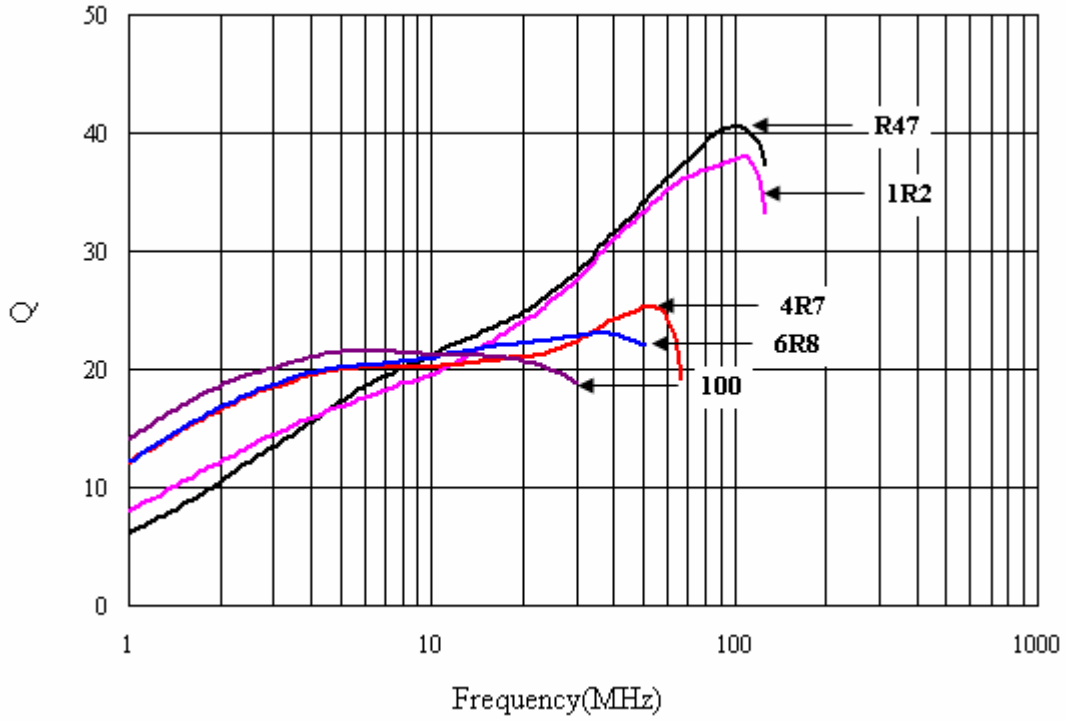
Characteristics (Reference)





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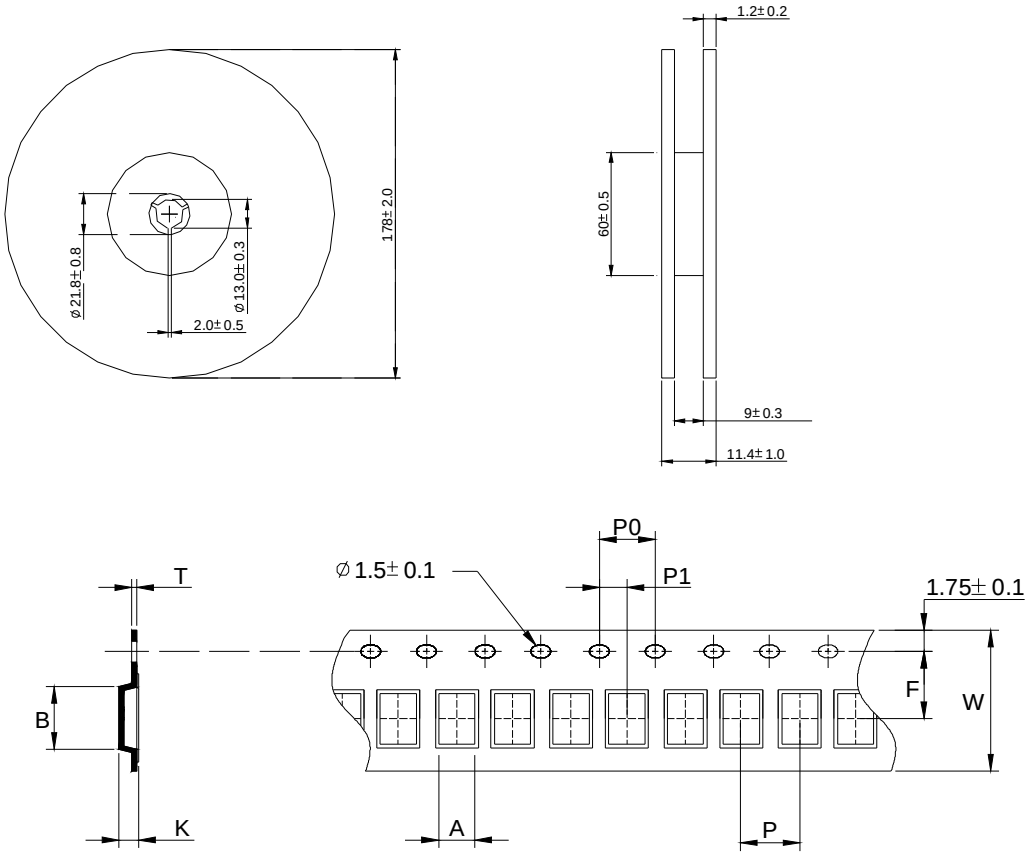
COIL SPECIFICATION

CUSTOMER		**PART NO.**	
PART NAME	**CARRIER & REEL**	**DATE**	
		SPEC (TYPE)	MNL-201212S-SERIES

Physical Dimension (Unit: mm)



	Tape Dimensions (mm)				Parts (PCS)
ITEM	P	P0	P1	W	
MNL-201212S	4	4	2	8	2000