



## Multilayer Ceramic Chip Inductors ~ MF1005HT SERIES

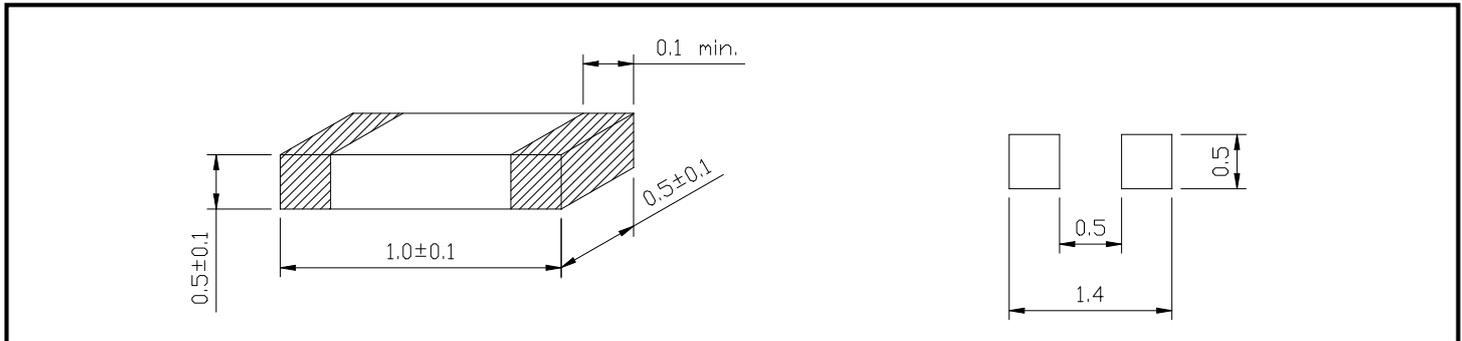


### PART NUMBERING SYSTEM

<b>MF</b>	<b>1005HT</b>	<b>2N2S</b>	<b>LF</b>
TYPE	DIMENSIONS	INDUCTANCE	LEAD FREE

### SHAPES AND DIMENSIONS

UNIT : mm



### FEATURES

1. Compact Size: Ideal for space-constrained designs, allowing for more components on a PCB without increasing size.
2. High-Frequency Performance: Suitable for applications operating in MHz to GHz ranges.
3. Reliability: Designed to withstand the automotive environment, including temperature variations and vibrations.
4. Non-Safety Critical Use
5. Operating Temperature: -55~+125°C (Including self-temperature rise)

### APPLICATION

1. Wireless Communication Modules: Bluetooth Connectivity, Wi-Fi Modules, Near Field Communication
2. GPS/GNSS Navigation Systems: Satellite Navigation Units, Satellite Navigation Units
3. Remote Keyless Entry Systems: Key Fobs and Receivers
4. Tire Pressure Monitoring Systems (TPMS) : Wireless Sensors
5. Infotainment Systems: AM/FM Radio Tuners, Satellite Radio and Digital Broadcasting
6. Antenna Matching Networks: Vehicle Antennas
7. Advanced Driver Assistance Systems (ADAS): Radar and Lidar Modules
8. Telematics Control Units (TCUs): Data Transmission Modules
9. Head-Up Displays (HUDs) and Instrument Clusters: High-Frequency Power Supplies
10. Onboard Diagnostics (OBD) Systems: Communication Interfaces



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### SPECIFICATION TABLE

### AEC-Q200

PART NUMBER	INDUCTANCE (nH) 100MHz	INDUCTANCE TOLERANCE	Q Min 100MHz	SRF (MHz) (min)	DCR (Ω) (max)	Irms (mA) (max)
MF1005HT-1N0S-LF	1.0	S	8.0	10000	0.06	1000
MF1005HT-1N1S-LF	1.1	S	8.0	10000	0.07	1000
MF1005HT-1N3S-LF	1.3	S	8.0	10000	0.07	1000
MF1005HT-1N5S-LF	1.5	S	8.0	10000	0.07	1000
MF1005HT-1N6S-LF	1.6	S	8.0	6000	0.08	1000
MF1005HT-1N8S-LF	1.8	S	8.0	6000	0.08	900
MF1005HT-2N0S-LF	2.0	S	8.0	6000	0.08	900
MF1005HT-2N2S-LF	2.2	S	8.0	6000	0.09	900
MF1005HT-2N4S-LF	2.4	S	8.0	6000	0.09	800
MF1005HT-2N7S-LF	2.7	S	8.0	6000	0.10	800
MF1005HT-3N0S-LF	3.0	S	8.0	6000	0.12	800
MF1005HT-3N3S-LF	3.3	S	8.0	6000	0.13	800
MF1005HT-3N6S-LF	3.6	S	8.0	4000	0.15	700
MF1005HT-3N9S-LF	3.9	S	8.0	4000	0.16	700
MF1005HT-4N3S-LF	4.3	S	8.0	4000	0.16	700
MF1005HT-4N7S-LF	4.7	S	8.0	4000	0.16	700
MF1005HT-5N1S-LF	5.1	S	8.0	4000	0.16	600
MF1005HT-5N6S-LF	5.6	S	8.0	4000	0.20	600
MF1005HT-6N2S-LF	6.2	S	8.0	3900	0.20	600
MF1005HT-6N8J-LF	6.8	J	8.0	3900	0.20	600
MF1005HT-7N5J-LF	7.5	J	8.0	3700	0.24	500
MF1005HT-8N2J-LF	8.2	J	8.0	3600	0.24	500
MF1005HT-9N1J-LF	9.1	J	8.0	3400	0.26	500
MF1005HT-10NJ-LF	10	J	8.0	3200	0.26	500

TOLERANCE ; S=±0.3 J=±5%



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### AEC-Q200

PART NUMBER	INDUCTANCE (nH) 100MHz	INDUCTANCE TOLERANCE	Q Min 100MHz	SRF (MHz) (min)	DCR (Ω) (max)	Irms (mA) (max)
MF1005HT-12NJ-LF	12	J	8.0	2700	0.50	400
MF1005HT-15NJ-LF	15	J	8.0	2300	0.50	400
MF1005HT-18NJ-LF	18	J	8.0	2100	0.60	350
MF1005HT-20NJ-LF	20	J	8.0	2000	0.60	350
MF1005HT-22NJ-LF	22	J	8.0	1900	0.60	350
MF1005HT-27NJ-LF	27	J	8.0	1600	0.70	300
MF1005HT-33NJ-LF	33	J	8.0	1300	0.80	300
MF1005HT-39NJ-LF	39	J	8.0	1200	1.00	250
MF1005HT-43NJ-LF	43	J	8.0	1100	1.10	250
MF1005HT-47NJ-LF	47	J	8.0	1000	1.10	250
MF1005HT-56NJ-LF	56	J	8.0	750	1.20	200
MF1005HT-68NJ-LF	68	J	8.0	750	1.40	200
MF1005HT-82NJ-LF	82	J	8.0	750	1.60	200
MF1005HT-R10J-LF	100	J	8.0	700	2.00	200
MF1005HT-R12J-LF	120	J	8.0	600	2.50	150
MF1005HT-R15J-LF	150	J	8.0	550	3.00	150
MF1005HT-R18J-LF	180	J	8.0	500	3.50	150
MF1005HT-R22J-LF	220	J	8.0	450	3.70	100
MF1005HT-R27J-LF	270	J	8.0	400	4.50	100
MF1005HT-R33J-LF	330	J	6.0	350	5.00	80
MF1005HT-R36J-LF	360	J	6.0	300	6.00	80

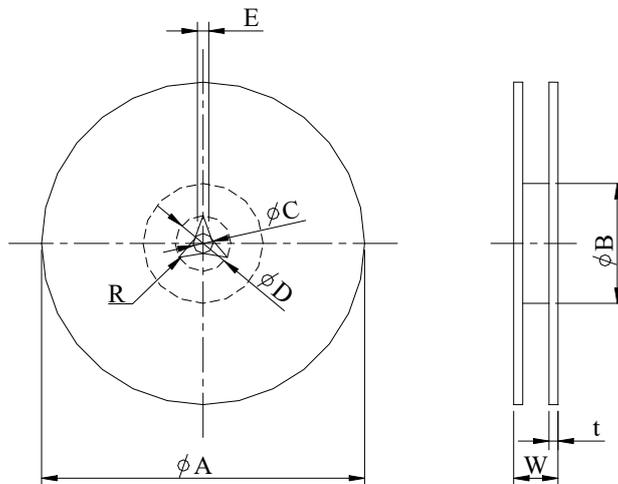
TOLERANCE ; S=±0.3 J=±5%



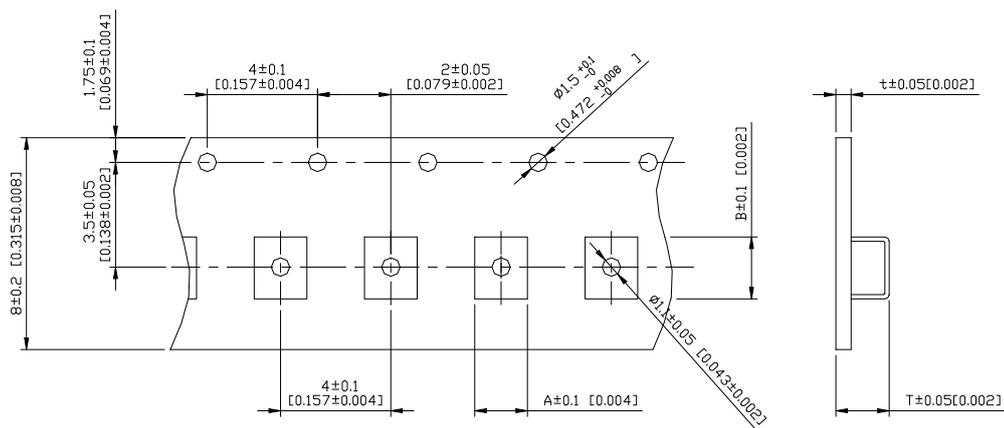
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### PACKAGING SPECIFICATION



REEL	A	B	C	D	E	W8	W12	t	R
T(ψ178mm)	ψ178±2	ψ60±1	ψ13±0.8	ψ21±0.8	2	10±1.5	14.5±1.5	1.27±0.2	1



TYPE	A	B	T	t	T(ψ178mm)	T(ψ330mm)
MF1005HT	0.65	1.15	0.80	0.2	10000 pcs/reel	—