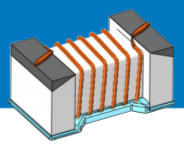
Wire Wound Chip Ceramic Inductor – MWSD – C – M Series



Operating temp. : -40°C ~+125°C

FEATURES

- Small chip suitable for surface mounting
- High Q value and high self-resonant frequency with ceramic material
- Tight inductance tolerance and high reliability
- Single-sided package, thinner than SDWL-C-M series

APPLICATIONS

- High frequency line of communication equipment and wireless module
- Mobile phones, smart watches and other portable electronic devices
- Bluetooth, W-LAN, Broadband network

PRODUCT IDENTIFICATION

1	2	3	4	5	6	7
MWSD	1005	C	10N	□	T	M01

1

Type	
MWSD	Wire Wound Chip Inductor

2

External Dimensions	
1005 [0402]	1.1×0.6
1608 [0603]	1.6×0.8

3

Material Code	
C	Ceramic

4

Nominal Inductance	
Example	Nominal Value
4N7	4.7nH
10N	10nH
R10	100nH

5

Inductance Tolerance	
B	±0.1nH
C	±0.2nH
D	±0.5nH
G	±2%
H	±3%
J	±5%

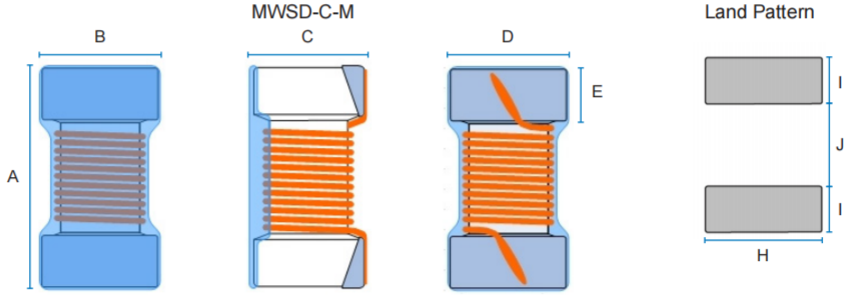
6

Packing	
B	Package
T	Tape & Reel

7

Internal Code	
M01/M11	Internal Code

SHAPE AND DIMENSIONS



Series	A	B	C	D	E	H REF.	I REF.	J REF.
MWSD1005C-M	1.1±0.1	0.6±0.1	0.55±0.1	0.5±0.1	0.2±0.1	0.65	0.35	0.50
MWSD1608C-M	1.60±0.20	0.80±0.20	0.80±0.20	0.80	0.30	1.02	0.64	0.64

Unit: mm

SPECIFICATIONS MWSD1005C-M01 TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min.Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	Ir
MWSD1005C1N5 ☐ TM01	1.5	B,C,D	10	100/250	>6000	0.03	1000
MWSD1005C1N6 ☐ TM01	1.6	C,D	10	100/250	>6000	0.07	750
MWSD1005C1N7 ☐ TM01	1.7	C,D	10	100/250	>6000	0.10	640
MWSD1005C1N8 ☐ TM01	1.8	C,D	10	100/250	>6000	0.16	460
MWSD1005C2N4 ☐ TM01	2.4	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N5 ☐ TM01	2.5	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N6 ☐ TM01	2.6	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N7 ☐ TM01	2.7	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N8 ☐ TM01	2.8	B,C,D	20	100/250	>6000	0.05	850
MWSD1005C2N9 ☐ TM01	2.9	B,C,D	20	100/250	>6000	0.07	750
MWSD1005C3N0 ☐ TM01	3.0	B,C,D	20	100/250	>6000	0.07	750
MWSD1005C3N1 ☐ TM01	3.1	B,C,D	20	100/250	>6000	0.13	570
MWSD1005C3N2 ☐ TM01	3.2	B,C,D	15	100/250	>6000	0.17	500
MWSD1005C3N9 ☐ TM01	3.9	C,D	25	100/250	>6000	0.07	750
MWSD1005C4N1 ☐ TM01	4.1	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N3 ☐ TM01	4.3	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N4 ☐ TM01	4.4	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N5 ☐ TM01	4.5	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N6 ☐ TM01	4.6	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N7 ☐ TM01	4.7	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N8 ☐ TM01	4.8	B,C,D	25	100/250	>6000	0.07	750
MWSD1005C4N9 ☐ TM01	4.9	B,C,D	25	100/250	>6000	0.12	600
MWSD1005C5N0 ☐ TM01	5.0	B,C,D	25	100/250	>6000	0.12	600
MWSD1005C5N1 ☐ TM01	5.1	B,C,D	25	100/250	>6000	0.12	600
MWSD1005C5N8 ☐ TM01	5.8	B,C,D	25	100/250	>6000	0.12	700
MWSD1005C6N2 ☐ TM01	6.2	B,C,D	25	100/250	>6000	0.09	700
MWSD1005C6N3 ☐ TM01	6.3	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N4 ☐ TM01	6.4	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N5 ☐ TM01	6.5	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N6 ☐ TM01	6.6	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N7 ☐ TM01	6.7	B,C,D	25	100/250	6000	0.09	700
MWSD1005C6N8 ☐ TM01	6.8	G,H,J	25	100/250	6000	0.09	700
MWSD1005C6N9 ☐ TM01	6.9	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N0 ☐ TM01	7.0	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N1 ☐ TM01	7.1	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N2 ☐ TM01	7.2	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N3 ☐ TM01	7.3	G,H,J	25	100/250	6000	0.13	570
MWSD1005C7N5 ☐ TM01	7.5	G,H,J	25	100/250	6000	0.13	570
MWSD1005C8N2 ☐ TM01	8.2	G,H,J	25	100/250	5500	0.14	540
MWSD1005C8N6 ☐ TM01	8.6	G,H,J	25	100/250	5500	0.14	540
MWSD1005C8N7 ☐ TM01	8.7	G,H,J	25	100/250	5500	0.14	540
MWSD1005C8N8 ☐ TM01	8.8	G,H,J	25	100/250	5500	0.14	540
MWSD1005C8N9 ☐ TM01	8.9	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N0 ☐ TM01	9.0	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N1 ☐ TM01	9.1	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N2 ☐ TM01	9.2	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N3 ☐ TM01	9.3	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N4 ☐ TM01	9.4	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N5 ☐ TM01	9.5	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N6 ☐ TM01	9.6	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N7 ☐ TM01	9.7	G,H,J	25	100/250	5500	0.14	540

SPECIFICATIONS MWSD1005C-M01 TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min.Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	Ir
MWSD1005C9N8 ☐ TM01	9.8	G,H,J	25	100/250	5500	0.14	540
MWSD1005C9N9 ☐ TM01	9.9	G,H,J	25	100/250	5500	0.14	540
MWSD1005C10N ☐ TM01	10	G,H,J	25	100/250	5500	0.17	500
MWSD1005C11N ☐ TM01	11	G,H,J	30	100/250	5500	0.14	500
MWSD1005C12N ☐ TM01	12	G,H,J	30	100/250	5500	0.14	500
MWSD1005C13N ☐ TM01	13	G,H,J	25	100/250	5000	0.21	430
MWSD1005C15N ☐ TM01	15	G,H,J	30	100/250	5000	0.16	460
MWSD1005C16N ☐ TM01	16	G,H,J	25	100/250	4500	0.24	370
MWSD1005C18N ☐ TM01	18	G,H,J	25	100/250	4500	0.27	370
MWSD1005C19N ☐ TM01	19	G,H,J	25	100/250	4500	0.27	370
MWSD1005C20N ☐ TM01	20	G,H,J	25	100/250	4000	0.27	370
MWSD1005C22N ☐ TM01	22	G,H,J	25	100/250	4000	0.30	310
MWSD1005C23N ☐ TM01	23	G,H,J	25	100/250	3800	0.30	310
MWSD1005C24N ☐ TM01	24	G,H,J	25	100/250	3500	0.52	280
MWSD1005C27N ☐ TM01	27	G,H,J	25	100/250	3500	0.52	280
MWSD1005C30N ☐ TM01	30	G,H,J	25	100/250	3300	0.58	270
MWSD1005C33N ☐ TM01	33	G,H,J	25	100/250	3200	0.63	260
MWSD1005C36N ☐ TM01	36	G,H,J	25	100/250	3100	0.63	260
MWSD1005C39N ☐ TM01	39	G,H,J	25	100/250	3000	0.70	250
MWSD1005C40N ☐ TM01	40	G,H,J	25	100/250	3000	0.70	250
MWSD1005C43N ☐ TM01	43	G,H,J	25	100/250	3000	0.70	250
MWSD1005C47N ☐ TM01	47	G,H,J	25	100/200	2900	1.08	210
MWSD1005C51N ☐ TM01	51	G,H,J	25	100/200	2850	1.08	210
MWSD1005C56N ☐ TM01	56	G,H,J	25	100/200	2800	1.17	200
MWSD1005C62N ☐ TM01	62	G,H,J	20	100/200	2600	1.82	145
MWSD1005C68N ☐ TM01	68	G,H,J	20	100/200	2500	1.96	140
MWSD1005C72N ☐ TM01	72	G,H,J	20	100/150	2500	2.10	135
MWSD1005C75N ☐ TM01	75	G,H,J	20	100/150	2400	2.10	135
MWSD1005C82N ☐ TM01	82	G,H,J	20	100/150	2300	2.24	130
MWSD1005C91N ☐ TM01	91	G,H,J	20	100/150	2100	2.38	125
MWSD1005CR10 ☐ TM01	100	G,H,J	20	100/150	1500	2.52	120
MWSD1005CR12 ☐ TM01	120	G,H,J	20	100/150	1000	2.66	110

MWSD1005C-M11 TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min.Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	Ir
MWSD1005C1N3 ☐ TM11	1.3	C,D	20	100/250	>6000	0.017	1200
MWSD1005C2N2 ☐ TM11	2.2	C,D	25	100/250	>6000	0.027	1000
MWSD1005C2N4 ☐ TM11	2.4	C,D	25	100/250	>6000	0.027	1000
MWSD1005C3N3 ☐ TM11	3.3	C,D	30	100/250	>6000	0.040	900
MWSD1005C3N4 ☐ TM11	3.4	C,D	30	100/250	>6000	0.040	900
MWSD1005C3N6 ☐ TM11	3.6	C,D	30	100/250	>6000	0.040	900
MWSD1005C3N9 ☐ TM11	3.9	C,D	30	100/250	>6000	0.040	900
MWSD1005C4N7 ☐ TM11	4.7	C,D	30	100/250	>6000	0.051	800
MWSD1005C5N1 ☐ TM11	5.1	D	30	100/250	>6000	0.051	800
MWSD1005C5N6 ☐ TM11	5.6	C,D	30	100/250	>6000	0.051	800

SPECIFICATIONS MWSD1608C-M01 TYPE

Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min.Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	Ir
MWSD1608C2N2 ☐ TM01	2.2	D	16	100/250	6000	0.042	700
MWSD1608C3N6 ☐ TM01	3.6	C,D	25	100/250	6000	0.059	850
MWSD1608C3N9 ☐ TM01	3.9	C,D	35	100/250	6000	0.059	850
MWSD1608C4N3 ☐ TM01	4.3	C,D	35	100/250	6000	0.059	850
MWSD1608C4N7 ☐ TM01	4.7	D	35	100/250	6000	0.059	850
MWSD1608C5N6 ☐ TM01	5.6	C,D	35	100/250	6000	0.082	750
MWSD1608C6N2 ☐ TM01	6.2	C,D	35	100/250	6000	0.082	750
MWSD1608C6N8 ☐ TM01	6.8	C,D	35	100/250	6000	0.082	750
MWSD1608C7N5 ☐ TM01	7.5	C,D	35	100/250	6000	0.082	750
MWSD1608C8N2 ☐ TM01	8.2	C,D	35	100/250	6000	0.11	650
MWSD1608C8N7 ☐ TM01	8.7	C,D	35	100/250	6000	0.11	650
MWSD1608C9N1 ☐ TM01	9.1	C,D	35	100/250	6000	0.11	650
MWSD1608C9N5 ☐ TM01	9.5	D	35	100/250	6000	0.11	650
MWSD1608C10N ☐ TM01	10	G,J	35	100/250	6000	0.11	650
MWSD1608C11N ☐ TM01	11	G,J	35	100/250	6000	0.11	650
MWSD1608C12N ☐ TM01	12	G,J	35	100/250	6000	0.13	600
MWSD1608C13N ☐ TM01	13	G,J	35	100/250	6000	0.13	600
MWSD1608C15N ☐ TM01	15	G,J	40	100/250	5500	0.13	600
MWSD1608C16N ☐ TM01	16	G,J	40	100/250	5500	0.16	550
MWSD1608C18N ☐ TM01	18	G,J	40	100/250	5000	0.16	550
MWSD1608C20N ☐ TM01	20	G,J	40	100/250	4300	0.16	550
MWSD1608C22N ☐ TM01	22	G,J	40	100/250	3900	0.17	500
MWSD1608C24N ☐ TM01	24	G,J	40	100/250	3800	0.21	500
MWSD1608C27N ☐ TM01	27	G,J	40	100/250	3700	0.21	440
MWSD1608C30N ☐ TM01	30	G,J	40	100/250	3300	0.23	420
MWSD1608C33N ☐ TM01	33	G,J	40	100/250	3200	0.23	420
MWSD1608C36N ☐ TM01	36	G,J	40	100/250	2900	0.26	400
MWSD1608C39N ☐ TM01	39	G,J	40	100/250	2800	0.26	400
MWSD1608C43N ☐ TM01	43	G,J	40	100/200	2700	0.29	380
MWSD1608C47N ☐ TM01	47	G,J	38	100/200	2600	0.29	380
MWSD1608C51N ☐ TM01	51	G,J	38	100/200	2500	0.33	370
MWSD1608C56N ☐ TM01	56	G,J	38	100/200	2400	0.35	360
MWSD1608C62N ☐ TM01	62	G,J	38	100/200	2300	0.51	280
MWSD1608C68N ☐ TM01	68	G,J	38	100/200	2200	0.38	340
MWSD1608C72N ☐ TM01	72	G,J	34	100/150	2100	0.56	270
MWSD1608C75N ☐ TM01	75	G,J	34	100/150	2050	0.56	270
MWSD1608C82N ☐ TM01	82	G,J	34	100/150	2000	0.60	250
MWSD1608C91N ☐ TM01	91	G,J	34	100/150	1900	0.64	230
MWSD1608CR10 ☐ TM01	100	G,J	34	100/150	1800	0.68	220
MWSD1608CR11 ☐ TM01	110	G,J,	32	100/150	1700	1.20	200
MWSD1608CR12 ☐ TM01	120	G,J	32	100/150	1600	1.30	180
MWSD1608CR13 ☐ TM01	130	G,J	32	100/150	1450	1.40	170
MWSD1608CR15 ☐ TM01	150	G,J	32	100/150	1400	1.50	160
MWSD1608CR16 ☐ TM01	160	G,J	32	100/150	1350	2.10	150
MWSD1608CR18 ☐ TM01	180	G,J	25	100/100	1300	2.20	140
MWSD1608CR20 ☐ TM01	200	G,J	25	100/100	1250	2.40	120
MWSD1608CR22 ☐ TM01	220	G,J	25	100/100	1200	2.50	120
MWSD1608CR27 ☐ TM01	270	G,J	30	100/100	960	3.40	110
MWSD1608CR33 ☐ TM01	330	G,J	30	100/100	800	5.50	85
MWSD1608CR39 ☐ TM01	390	G,J	30	100/100	800	6.20	80
MWSD1608CR47 ☐ TM01	470	G,J	30	100/100	700	7.00	75

SPECIFICATIONS

MWSD1608C-M11 TYPE

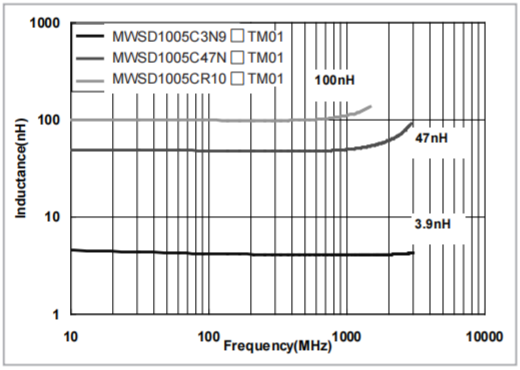
Part Number	Inductance	Tolerance	Min. Quality Factor	L/Q Test Freq.	Min.Self-resonant Frequency	Max. DC Resistance	Max. Rated Current
Units	nH	-	-	MHz	MHz	Ω	mA
Symbol	L	-	Q	Freq.	S.R.F	DCR	Ir
MWSD1608C2N2 ☐ TM11	2.2	C,D	18	100/250	>6000	0.018	1400
MWSD1608C3N9 ☐ TM11	3.9	C,D	38	100/250	>6000	0.032	1000
MWSD1608C5N6 ☐ TM11	5.6	C,D	38	100/250	>6000	0.045	900
MWSD1608C6N8 ☐ TM11	6.8	C,D	38	100/250	>6000	0.045	900
MWSD1608C8N2 ☐ TM11	8.2	S,D	38	100/250	>6000	0.058	800
MWSD1608C10N ☐ TM11	10	G,J	38	100/250	5000	0.070	800
MWSD1608C12N ☐ TM11	12	G,J	38	100/250	5000	0.071	750
MWSD1608C15N ☐ TM11	15	G,J	42	100/250	4500	0.085	700
MWSD1608C18N ☐ TM11	18	G,J	42	100/250	3500	0.085	700
MWSD1608C22N ☐ TM11	22	G,J	42	100/250	3200	0.099	640
MWSD1608C27N ☐ TM11	27	G,J	42	100/250	2800	0.116	590
MWSD1608C33N ☐ TM11	33	J	42	100/250	2500	0.132	550

※: Please refer to "Measurement Notice for RF Inductors".

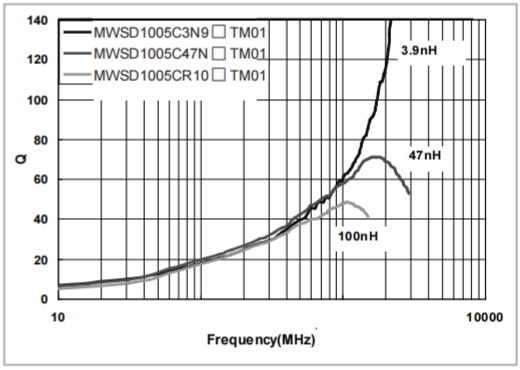
TYPICAL ELECTRICAL CHARACTERISTICS

MWSD1005C-M TYPE

Inductance vs. Frequency Characteristics

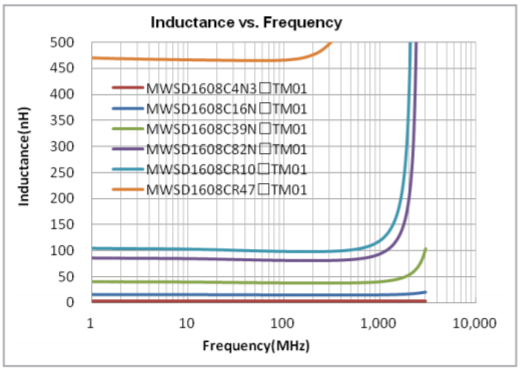


Q vs. Frequency Characteristics

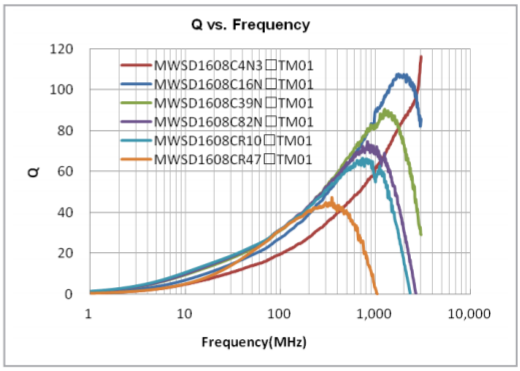


MWSD1608C-M01 TYPE

Inductance vs. Frequency Characteristics



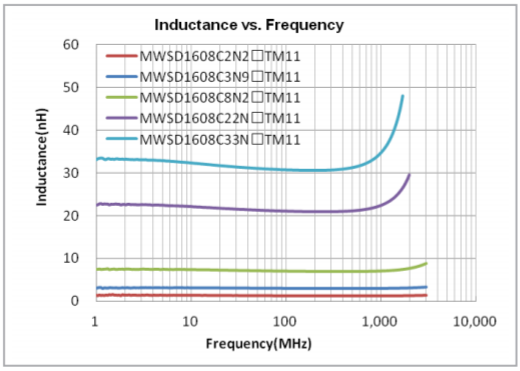
Q vs. Frequency Characteristics



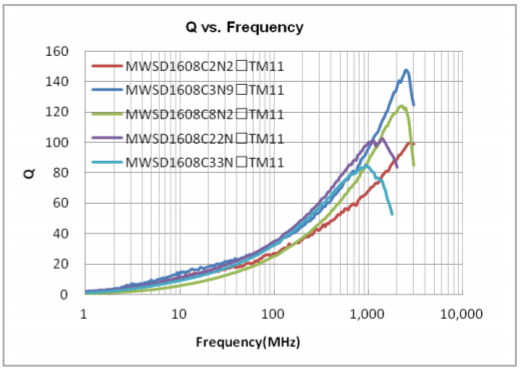
DETAIL ELECTRICAL CHARACTERISTICS

MWSD1608C-M11 TYPE

Inductance vs. Frequency Characteristics



Q vs. Frequency Characteristics



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Fixed Inductors ***category:***

Click to view products by Sunlord ***manufacturer:***

Other Similar products are found below :

CR32NP-100KC CR54NP-470LC 70F224AI MGDQ4-00004-P MHQ1005P10NJ MHQ1005P1N0S MHQ1005P2N4S MHQ1005P3N6S MHQ1005P5N1S MHQ1005P8N2J PE-53601NL PE-53602NL PG0936.113NLT 9220-20 9310-16 PM06-2N7 PM06-39NJ A01TK 1206CS-471XJ HC2-R47-R HC8-1R2-R HCF1305-3R3-R 1206CS-151XG RCH664NP-140L RCH664NP-4R7M RCP1317NP-391L RCR110DNP-331L DH2280-4R7M DS1608C-106 B10TJ B82498B3101J000 ELJ-RE27NJF2 1812CS-153XJ 1812CS-183XJ 1812CS-223XJ 1812LS-104XJ 1812LS-105XJ 1812LS-124XJ 1812LS-154XJ 1812LS-223XJ 1812LS-224XJ 1812LS-563XJ 1812LS-683XJ 1812LS-824XJ NIN-FB101JTR110F NIN-FB471JTR62F NIN-FC1R5JTR220F NIN-HCR15JTRF NIN-HCR33JTRF NIN-HDR22JTRF