Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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Notice for TAIYO YUDEN Products

[For General Electronic Equipment (General Environment)]

Please read this notice before using the TAIYO YUDEN products.

⚠ REMINDERS

- Product information in this catalog is as of October 2017. All of the contents specified herein are subject to change without notice due to technical improvements, etc. Therefore, please check for the latest information carefully before practical application or use of our products.

  Please note that TAIYO YUDEN shall not be in any way responsible for any damages and defects in products or equipment incorporating our products, which are caused under the conditions other than those specified in this catalog or individual product specification sheets.

- Please contact TAIYO YUDEN for further details of product specifications as the individual product specification sheets are available.

- Please conduct validation and verification of our products in actual condition of mounting and operating environment before using our products.

- The products listed in this catalog are intended for use in general electronic equipment (e.g., AV equipment, OA equipment, home electric appliances, office equipment, information and communication equipment including, without limitation, mobile phone, and PC) and medical equipment classified as Class I or II by IMDRF. Please be sure to contact TAIYO YUDEN for further information before using the products for any equipment which may directly cause loss of human life or bodily injury (e.g., transportation equipment including, without limitation, automotive powertrain control system, train control system, and ship control system, traffic signal equipment, disaster prevention equipment, medical equipment classified as Class III by IMDRF, highly public information network equipment including, without limitation, telephone exchange, and base station).

  Please do not incorporate our products into any equipment requiring high levels of safety and/or reliability (e.g., aerospace equipment, aviation equipment*, medical equipment classified as Class IV by IMDRF, nuclear control equipment, undersea equipment, military equipment).

  *Note: There is a possibility that our products can be used only for aviation equipment that does not directly affect the safe operation of aircraft (e.g., in-flight entertainment, cabin light, electric seat, cooking equipment) if such use meets requirements specified separately by TAIYO YUDEN. Please be sure to contact TAIYO YUDEN for further information before using our products for such aviation equipment.

  When our products are used even for high safety and/or reliability-required devices or circuits of general electronic equipment, it is strongly recommended to perform a thorough safety evaluation prior to use of our products and to install a protection circuit as necessary.

  Please note that unless you obtain prior written consent of TAIYO YUDEN, TAIYO YUDEN shall not be in any way responsible for any damages incurred by you or third parties arising from use of the products listed in this catalog for any equipment requiring inquiry to TAIYO YUDEN or prohibited for use by TAIYO YUDEN as described above.

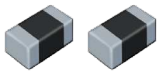
- Information contained in this catalog is intended to convey examples of typical performances and/or applications of our products and is not intended to make any warranty with respect to the intellectual property rights or any other related rights of TAIYO YUDEN or any third parties nor grant any license under such rights.

- Please note that the scope of warranty for our products is limited to the delivered our products themselves and TAIYO YUDEN shall not be in any way responsible for any damages resulting from a fault or defect in our products. Notwithstanding the foregoing, if there is a written agreement (e.g., supply and purchase agreement, quality assurance agreement) signed by TAIYO YUDEN and your company, TAIYO YUDEN will warrant our products in accordance with such agreement.

- The contents of this catalog are applicable to our products which are purchased from our sales offices or authorized distributors (hereinafter "TAIYO YUDEN's official sales channel"). Please note that the contents of this catalog are not applicable to our products purchased from any seller other than TAIYO YUDEN's official sales channel.

- Caution for Export
  Some of our products listed in this catalog may require specific procedures for export according to "U.S. Export Administration Regulations", "Foreign Exchange and Foreign Trade Control Law" of Japan, and other applicable regulations. Should you have any questions on this matter, please contact our sales staff.

MULTILAYER CHIP BEAD INDUCTORS FOR POWER LINES(BK SERIES P TYPE)



WAVE* REFLOW

*Except for BKP0603, BKP1005

■PARTS NUMBER

* Operating Temp.: −55〜+85℃

B K P	1 6 0 8	H S	1 8 1	—	T	△
①	②	③	④	⑤	⑥	⑦

△=Blank space

①Series name

Code	Series name
BKP	Multilayer chip bead inductor for power line

②Dimensions (L×W)

Code	Type (inch)	Dimensions (L×W) [mm]
0402	0402 (01005)	0.4×0.2
0603	0603 (0201)	0.6×0.3
1005	1005 (0402)	1.0×0.5
1608	1608 (0603)	1.6×0.8
2125	2125 (0805)	2.0×1.25

③Material

Code	Material
HS	Refer to impedance curves for material differences
HM	
TS	
TM	
EM	

④Nominal impedance

Code (example)	Nominal impedance [Ω]
330	33
101	100
391	390

⑤Characteristics

Code	Characteristics
—	Standard

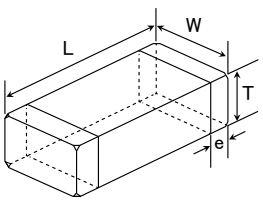
⑥Packaging

Code	Packaging
T	Taping

⑦Internal code

Code	Internal code
△	Standard

■STANDARD EXTERNAL DIMENSIONS / STANDARD QUANTITY



Type	L	W	T	e	Standard quantity [pcs]	
					Paper tape	Embossed tape
BKP0402 (01005)	0.40±0.02 (0.016±0.001)	0.20±0.02 (0.008±0.001)	0.20±0.02 (0.008±0.001)	0.10+0.04/−0.03 (0.004+0.002/−0.001)	20000	—
BKP0603 (0201)	0.6±0.03 (0.024±0.001)	0.3±0.03 (0.012±0.001)	0.3±0.03 (0.012±0.001)	0.15±0.05 (0.006±0.002)	15000	—
BKP1005 (0402)	1.0±0.05 (0.039±0.002)	0.5±0.05 (0.020±0.002)	0.5±0.05 (0.020±0.002)	0.25±0.1 (0.010±0.004)	10000	—
BKP1608 (0603)	1.6±0.15 (0.063±0.006)	0.8±0.15 (0.031±0.006)	0.8±0.15 (0.031±0.006)	0.3±0.2 (0.012±0.008)	4000	—
BKP2125 (0805)	2.0+0.3/−0.1 (0.079+0.012/−0.004)	1.25±0.2 (0.049±0.008)	0.85±0.2 (0.033±0.008)	0.5±0.3 (0.020±0.012)	4000	—

Unit: mm (inch)

■PARTS NUMBER

●BKP0402

Parts number	EHS	Nominal impedance [Ω]	Impedance tolerance	Measuring frequency [MHz]	DC Resistance [mΩ] (max.)	Rated current [A] (max.)	Thickness [mm]
BKP0402HM100-T	RoHS	10	±5Ω	100	50	1.1	0.20 ±0.02
BKP0402HM220-T	RoHS	22	±25%	100	110	0.75	0.20 ±0.02
BKP0402HM330-T	RoHS	33	±25%	100	150	0.55	0.20 ±0.02

●BKP0603

Parts number	EHS	Nominal impedance [Ω]	Impedance tolerance	Measuring frequency [MHz]	DC Resistance [mΩ] (max.)	Rated current [A] (max.)	Thickness [mm]
BKP0603HS100-T	RoHS	10	±5Ω	100	30	1.3	0.30 ±0.03
BKP0603HS220-T	RoHS	22	±25%	100	65	1.0	0.30 ±0.03
BKP0603HS330-T	RoHS	33	±25%	100	70	1.0	0.30 ±0.03
BKP0603HS800-T	RoHS	80	±25%	100	120	1.0	0.30 ±0.03
BKP0603HS121-T	RoHS	120	±25%	100	150	0.85	0.30 ±0.03
BKP0603HM100-T	RoHS	10	±5Ω	100	30	1.3	0.30 ±0.03
BKP0603HM220-T	RoHS	22	±25%	100	70	1.0	0.30 ±0.03
BKP0603HM330-T	RoHS	33	±25%	100	70	1.0	0.30 ±0.03
BKP0603HM800-T	RoHS	80	±25%	100	120	1.0	0.30 ±0.03
BKP0603HM121-T	RoHS	120	±25%	100	180	0.80	0.30 ±0.03
BKP0603TS220-T	RoHS	22	±25%	100	40	1.8	0.30 ±0.03
BKP0603TS330-T	RoHS	33	±25%	100	55	1.5	0.30 ±0.03
BKP0603TM220-T	RoHS	22	±25%	100	40	1.8	0.30 ±0.03
BKP0603TM330-T	RoHS	33	±25%	100	55	1.5	0.30 ±0.03

●BKP1005

Parts number	EHS	Nominal impedance [Ω]	Impedance tolerance	Measuring frequency [MHz]	DC Resistance [mΩ] (max.)	Rated current [A] (max.)	Thickness [mm]
BKP1005EM100-T	RoHS	10	±5Ω	100	30	2.4	0.50 ±0.05
BKP1005EM300-T	RoHS	30	±25%	100	35	2.2	0.50 ±0.05
BKP1005EM600-T	RoHS	60	±25%	100	60	1.7	0.50 ±0.05
BKP1005EM121-T	RoHS	120	±25%	100	85	1.55	0.50 ±0.05
BKP1005EM221-T	RoHS	220	±25%	100	150	1.00	0.50 ±0.05
BKP1005EM331-T	RoHS	330	±25%	100	220	0.80	0.50 ±0.05
BKP1005HS100-T	RoHS	10	±25%	100	30	2.0	0.50 ±0.05
BKP1005HS330-T	RoHS	33	±25%	100	50	1.7	0.50 ±0.05
BKP1005HS680-T	RoHS	68	±25%	100	75	1.5	0.50 ±0.05
BKP1005HS121-T	RoHS	120	±25%	100	140	1.0	0.50 ±0.05
BKP1005HS221-T	RoHS	220	±25%	100	200	0.80	0.50 ±0.05
BKP1005HM121-T	RoHS	120	±25%	100	120	1.1	0.50 ±0.05
BKP1005HM221-T	RoHS	220	±25%	100	180	0.90	0.50 ±0.05
BKP1005TS330-T	RoHS	33	±25%	100	39±30%	1.7	0.50 ±0.05
BKP1005TS680-T	RoHS	68	±25%	100	55±30%	1.5	0.50 ±0.05
BKP1005TS121-T	RoHS	120	±25%	100	70±30%	1.3	0.50 ±0.05
BKP1005TM121-T	RoHS	120	±25%	100	100	1.3	0.50 ±0.05

●BKP1608

Parts number	EHS	Nominal impedance [Ω]	Impedance tolerance	Measuring frequency [MHz]	DC Resistance [mΩ] (max.)	Rated current [A] (max.)	Thickness [mm]
BKP1608HS330-T	RoHS	33	±25%	100	25	3.0	0.80 ±0.15
BKP1608HS600-T	RoHS	60	±25%	100	40	2.5	0.80 ±0.15
BKP1608HS101-T	RoHS	100	±25%	100	50	1.7	0.80 ±0.15
BKP1608HS121-T	RoHS	120	±25%	100	35	2.7	0.80 ±0.15
BKP1608HS181-T	RoHS	180	±25%	100	75	1.5	0.80 ±0.15
BKP1608HS271-T	RoHS	270	±25%	100	110	1.2	0.80 ±0.15
BKP1608HS391-T	RoHS	390	±25%	100	140	1.0	0.80 ±0.15
BKP1608HS471-T	RoHS	470	±25%	100	180	1.0	0.80 ±0.15

●BKP2125

Parts number	EHS	Nominal impedance [Ω]	Impedance tolerance	Measuring frequency [MHz]	DC Resistance [mΩ] (max.)	Rated current [A] (max.)	Thickness [mm]
BKP2125HS330-T	RoHS	33	±25%	100	20	4.0	0.85 ±0.2
BKP2125HS600-T	RoHS	60	±25%	100	25	3.0	0.85 ±0.2
BKP2125HS101-T	RoHS	100	±25%	100	40	2.5	0.85 ±0.2
BKP2125HS221-T	RoHS	220	±25%	100	50	2.0	0.85 ±0.2
BKP2125HS331-T	RoHS	330	±25%	100	75	1.5	0.85 ±0.2

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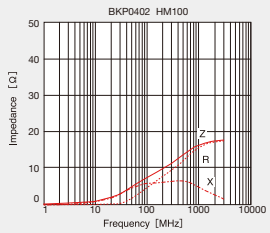
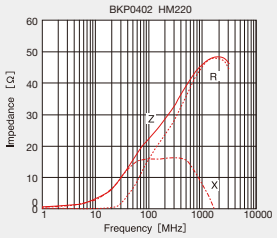
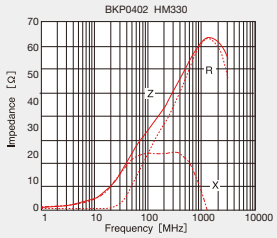
ELECTRICAL CHARACTERISTICS

BKP0402







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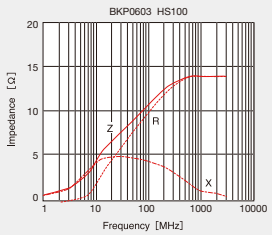
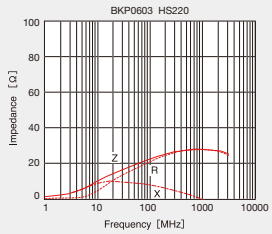
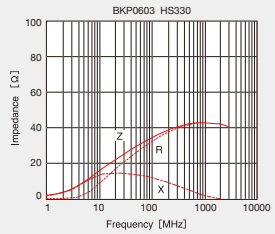
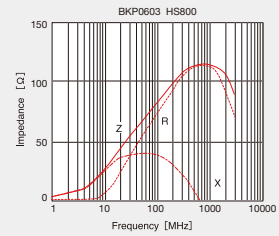
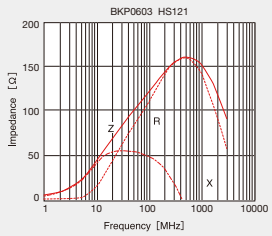
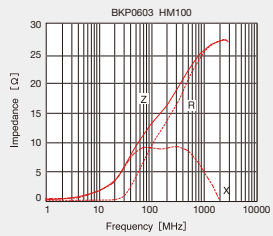


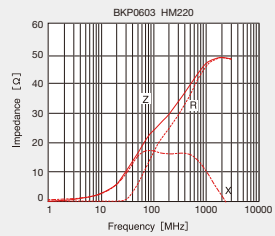


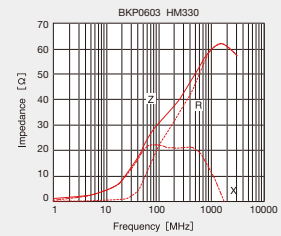


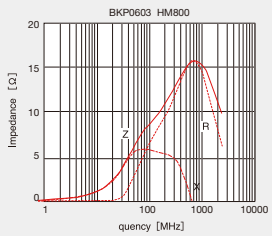


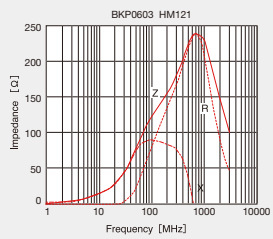


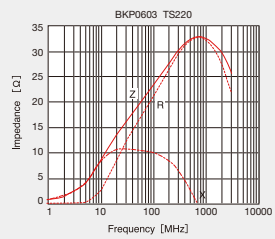


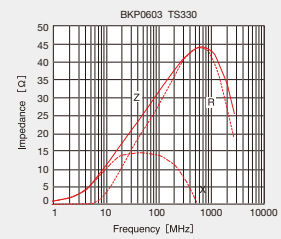


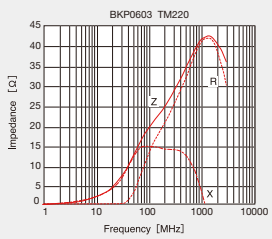


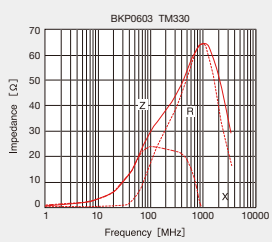




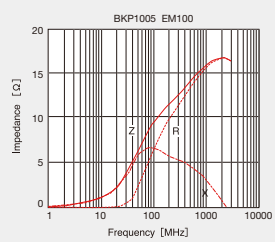


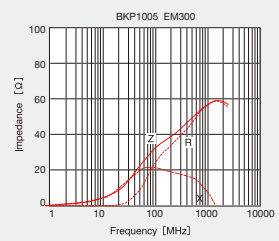


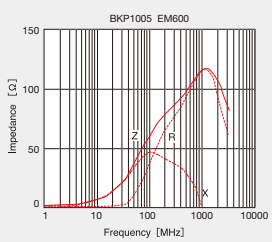


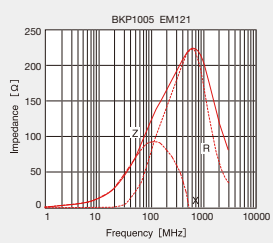


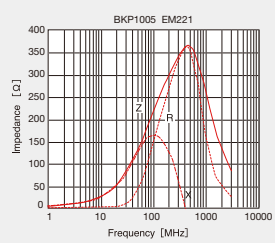
BKP1005

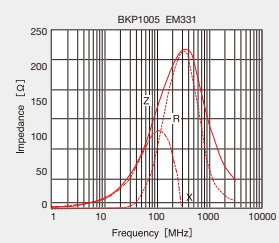


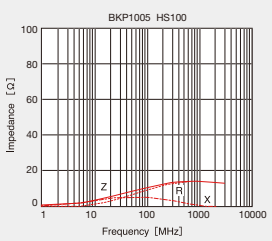












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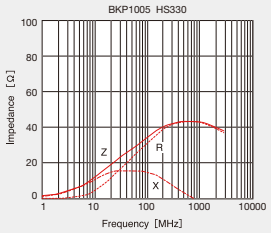

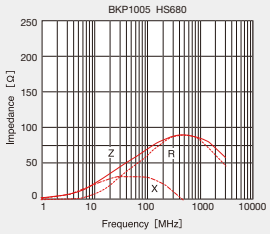

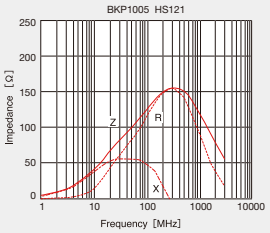

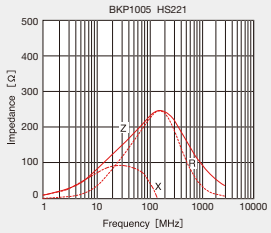

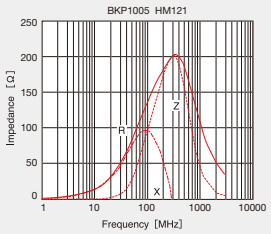

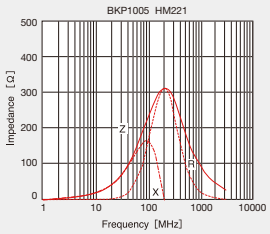

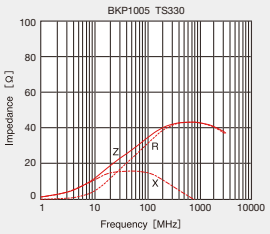

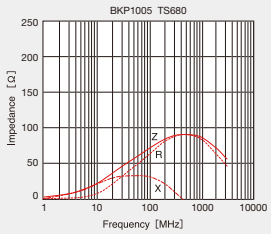

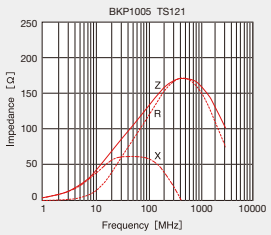

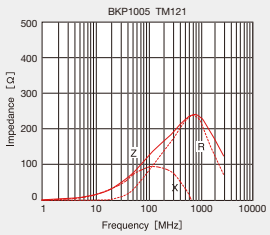

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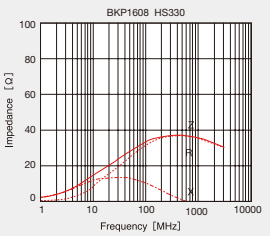

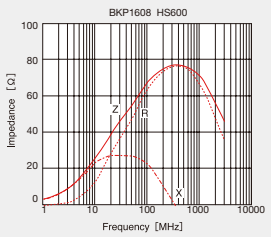

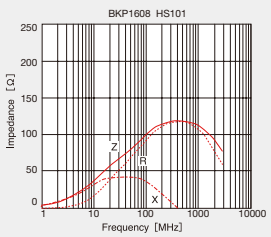

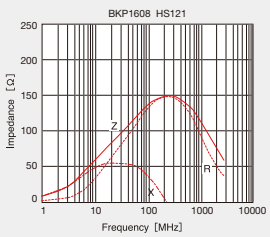

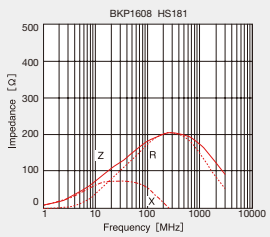

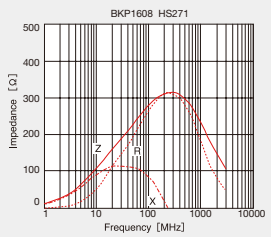

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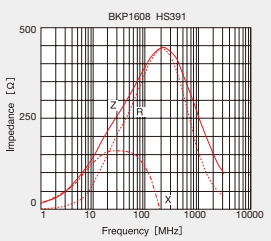
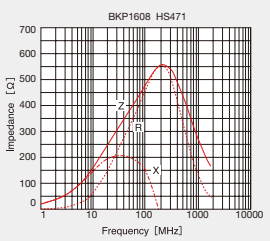
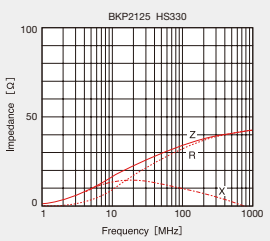
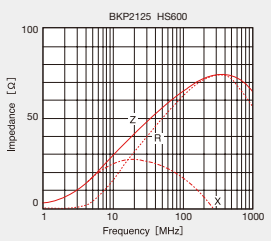
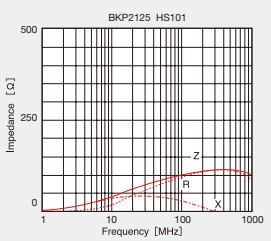
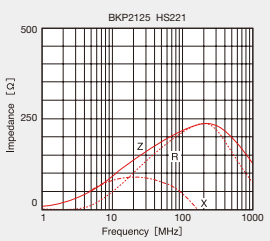


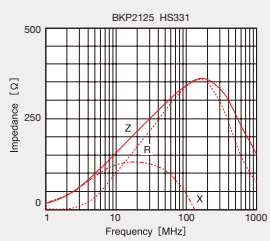












▶ This catalog contains the typical specification only due to the limitation of space. When you consider the purchase of our products, please check our product specification sheets. For details of each product (characteristics graph, reliability information, precautions for use, and so on), see our website (http://www.ty-top.com/) .

Multilayer chip inductors
Multilayer chip inductors for high frequency, Multilayer chip bead inductors
Multilayer common mode choke coils (MC series F type)
Metal Multilayer Chip Power Inductors (MCOIL™ MC series)

■PACKAGING

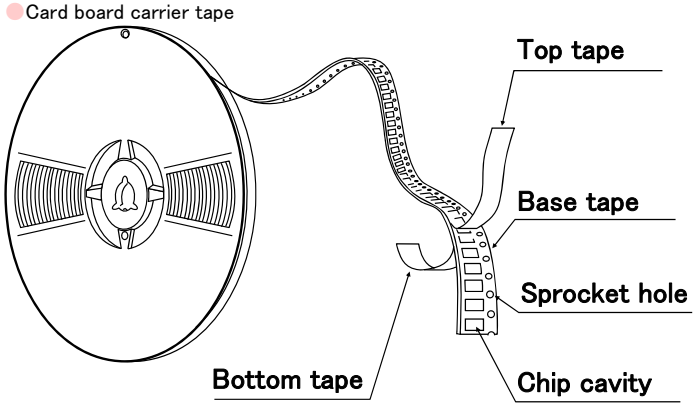
①Minimum Quantity

●Tape & Reel Packaging

Type	Thickness mm (inch)	Standard Quantity [pcs]	
		Paper Tape	Embossed Tape
CK1608 (0603)	0.8 (0.031)	4000	—
CK2125 (0805)	0.85 (0.033)	4000	—
	1.25 (0.049)	—	2000
CKS2125 (0805)	0.85 (0.033)	4000	—
	1.25 (0.049)	—	2000
CKP1608 (0603)	0.8 (0.031)	4000	—
CKP2012 (0805)	0.9 (0.035)	—	3000
CKP2016 (0806)	0.9 (0.035)	—	3000
CKP2520 (1008)	0.7 (0.028)	—	3000
	0.9 (0.035)	—	3000
	1.1 (0.043)	—	2000
NM2012 (0805)	0.9 (0.035)	—	3000
NM2520 (1008)	0.9 (0.035)	—	3000
	1.1 (0.043)	—	2000
LK1005 (0402)	0.5 (0.020)	10000	—
LK1608 (0603)	0.8 (0.031)	4000	—
LK2125 (0805)	0.85 (0.033)	4000	—
	1.25 (0.049)	—	2000
HK0603 (0201)	0.3 (0.012)	15000	—
HK1005 (0402)	0.5 (0.020)	10000	—
HK1608 (0603)	0.8 (0.031)	4000	—
HK2125 (0805)	0.85 (0.033)	—	4000
	1.0 (0.039)	—	3000
HKQ0402 (01005)	0.2 (0.008)	20000	40000
HKQ0603W (0201)	0.3 (0.012)	15000	—
HKQ0603S (0201)	0.3 (0.012)	15000	—
HKQ0603U (0201)	0.3 (0.012)	15000	—
AQ105 (0402)	0.5 (0.020)	10000	—
BK0402 (01005)	0.2 (0.008)	20000	—
BK0603 (0201)	0.3 (0.012)	15000	—
BK1005 (0402)	0.5 (0.020)	10000	—
BKH0603 (0201)	0.3 (0.012)	15000	—
BKH1005 (0402)	0.5 (0.020)	10000	—
BK1608 (0603)	0.8 (0.031)	4000	—
BK2125 (0805)	0.85 (0.033)	4000	—
	1.25 (0.049)	—	2000
BK2010 (0804)	0.45 (0.018)	4000	—
BK3216 (1206)	0.8 (0.031)	—	4000
BKP0402 (01005)	0.2 (0.008)	20000	—
BKP0603 (0201)	0.3 (0.012)	15000	—
BKP1005 (0402)	0.5 (0.020)	10000	—
BKP1608 (0603)	0.8 (0.031)	4000	—
BKP2125 (0805)	0.85 (0.033)	4000	—
MCF0605 (0202)	0.3 (0.012)	15000	—
MCF0806 (0302)	0.4 (0.016)	—	10000
MCF1210 (0504)	0.55 (0.022)	—	5000
MCF2010 (0804)	0.45 (0.018)	—	4000
MCFK1608 (0603)	0.6 (0.024)	4000	—
MCFE1608 (0603)	0.65 (0.026)	4000	—
MCKK1608 (0603)	1.0 (0.039)		3000
MCHK2012 (0806)	0.8 (0.031)	4000	—
MCKK2012 (0805)	1.0 (0.039)	–	3000

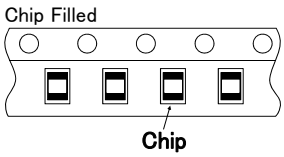
②Taping material

Card board carrier tape

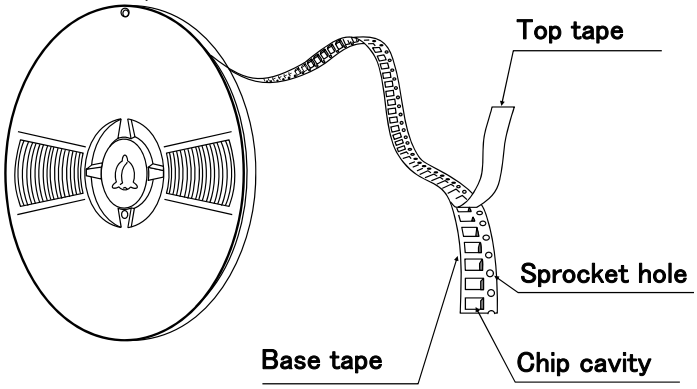


CK	1608
CKP	1608
CK	2125
CKS	2125
LK	1005
LK	1608
LK	2125
HK	0603
HK	1005
HK	1608
HKQ	0402
HKQ	0603
AQ	105

BK	0402
BK	0603
BK	1005
BK	1608
BK	2125
BK	2010
BKP	0402
BKP	0603
BKP	1005
BKP	1608
BKP	2125
BKH	0603
BKH	1005
MCF	0605
MC	1608
MC	2012

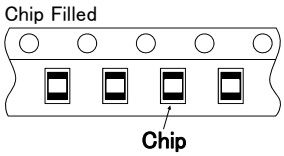


Embossed Tape



CK	2125
CKS	2125
CKP	2012
CKP	2016
CKP	2520
NM	2012
NM	2520
LK	2125
HKQ	0402
HK	2125

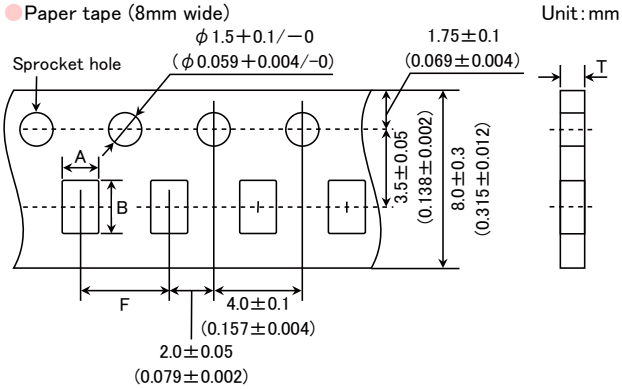
BK	2125
BK	3216
MCF	0806
MCF	1210
MCF	2010
MC	1608
MC	2012



③Taping Dimensions

Paper tape (8mm wide)

Unit : mm (inch)

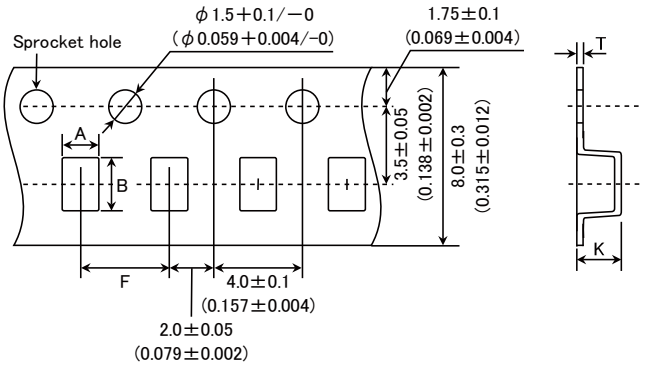


Type	Thickness mm(inch)	Chip cavity		Insertion Pitch	Tape Thickness
		A	B	F	T
CK1608(0603)	0.8 (0.031)	1.0±0.2 (0.039±0.008)	1.8±0.2 (0.071±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
CK2125(0805)	0.85(0.033)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
CKS2125(0805)	0.85(0.033)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
CKP1608(0603)	0.8 (0.031)	1.0±0.2 (0.039±0.008)	1.8±0.2 (0.071±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
LK1005(0402)	0.5 (0.020)	0.65±0.1 (0.026±0.004)	1.15±0.1 (0.045±0.004)	2.0±0.05 (0.079±0.002)	0.8max (0.031max)
LK1608(0603)	0.8 (0.031)	1.0±0.2 (0.039±0.008)	1.8±0.2 (0.071±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
LK2125(0805)	0.85(0.033)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
HK0603(0201)	0.3 (0.012)	0.40±0.06 (0.016±0.002)	0.70±0.06 (0.028±0.002)	2.0±0.05 (0.079±0.002)	0.45max (0.018max)
HK1005(0402)	0.5 (0.020)	0.65±0.1 (0.026±0.004)	1.15±0.1 (0.045±0.004)	2.0±0.05 (0.079±0.002)	0.8max (0.031max)
HK1608(0603)	0.8 (0.031)	1.0±0.2 (0.039±0.008)	1.8±0.2 (0.071±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
HKQ0402(01005)	0.2 (0.008)	0.25±0.04 (0.010±0.002)	0.45±0.04 (0.018±0.002)	2.0±0.05 (0.079±0.002)	0.36max (0.014max)
HKQ0603W(0201)	0.3 (0.012)	0.40±0.06 (0.016±0.002)	0.70±0.06 (0.028±0.002)	2.0±0.05 (0.079±0.002)	0.45max (0.018max)
HKQ0603S(0201)	0.3 (0.012)	0.40±0.06 (0.016±0.002)	0.70±0.06 (0.028±0.002)	2.0±0.05 (0.079±0.002)	0.45max (0.018max)
HKQ0603U(0201)	0.3 (0.012)	0.40±0.06 (0.016±0.002)	0.70±0.06 (0.028±0.002)	2.0±0.05 (0.079±0.002)	0.45max (0.018max)
AQ105(0402)	0.5 (0.020)	0.75±0.1 (0.030±0.004)	1.15±0.1 (0.045±0.004)	2.0±0.05 (0.079±0.002)	0.8max (0.031max)
BK0402(01005)	0.2 (0.008)	0.25±0.04 (0.010±0.002)	0.45±0.04 (0.018±0.002)	2.0±0.05 (0.079±0.002)	0.36max (0.014max)
BK0603(0201)	0.3 (0.012)	0.40±0.06 (0.016±0.002)	0.70±0.06 (0.028±0.002)	2.0±0.05 (0.079±0.002)	0.45max (0.018max)
BK1005(0402)	0.5 (0.020)	0.65±0.1 (0.026±0.004)	1.15±0.1 (0.045±0.004)	2.0±0.05 (0.079±0.002)	0.8max (0.031max)
BK1608(0603)	0.8 (0.031)	1.0±0.2 (0.039±0.008)	1.8±0.2 (0.071±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
BK2125(0805)	0.85(0.033)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
BK2010(0804)	0.45(0.018)	1.2±0.1 (0.047±0.004)	2.17±0.1 (0.085±0.004)	4.0±0.1 (0.157±0.004)	0.8max (0.031max)
BKP0402(01005)	0.2 (0.008)	0.25±0.04 (0.010±0.002)	0.45±0.04 (0.018±0.002)	2.0±0.05 (0.079±0.002)	0.36max (0.014max)
BKP0603(0201)	0.3 (0.012)	0.40±0.06 (0.016±0.002)	0.70±0.06 (0.028±0.002)	2.0±0.05 (0.079±0.002)	0.45max (0.018max)
BKP1005(0402)	0.5 (0.020)	0.65±0.1 (0.026±0.004)	1.15±0.1 (0.045±0.004)	2.0±0.05 (0.079±0.002)	0.8max (0.031max)
BKP1608(0603)	0.8 (0.031)	1.0±0.2 (0.039±0.008)	1.8±0.2 (0.071±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
BKP2125(0805)	0.85(0.033)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.1max (0.043max)
BKH0603(0201)	0.3 (0.012)	0.40±0.06 (0.016±0.002)	0.70±0.06 (0.028±0.002)	2.0±0.05 (0.079±0.002)	0.45max (0.018max)
BKH1005(0402)	0.5 (0.020)	0.65±0.1 (0.026±0.004)	1.15±0.1 (0.045±0.004)	2.0±0.05 (0.079±0.002)	0.8max (0.031max)
MCF0605(0202)	0.3 (0.012)	0.62±0.03 (0.024±0.001)	0.77±0.03 (0.030±0.001)	2.0±0.05 (0.079±0.002)	0.45max (0.018max)
MCFK1608(0603)	0.6 (0.024)	1.1±0.05 (0.043±0.002)	1.9±0.05 (0.075±0.002)	4.0±0.1 (0.157±0.004)	0.72max (0.028max)
MCFE1608(0603)	0.65(0.026)	1.1±0.05 (0.043±0.002)	1.9±0.05 (0.075±0.002)	4.0±0.1 (0.157±0.004)	0.9max (0.035max)
MCHK2012(0805)	0.8 (0.031)	1.55±0.2 (0.061±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	0.9max (0.035max)

Unit : mm(inch)

● Embossed Tape (8mm wide)

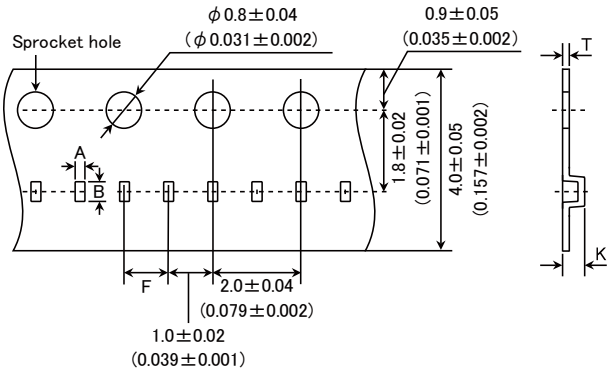
Unit : mm (inch)



Type	Thickness mm (inch)	Chip cavity		Insertion Pitch	Tape Thickness	
		A	B	F	K	T
CK2125 (0805)	1.25 (0.049)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	2.0 (0.079)	0.3 (0.012)
CKS2125 (0805)	1.25 (0.049)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	2.0 (0.079)	0.3 (0.012)
CKP2012 (0805)	0.9 (0.035)	1.55±0.2 (0.061±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.3 (0.051)	0.3 (0.012)
CKP2016 (0806)	0.9 (0.035)	1.8±0.1 (0.071±0.004)	2.2±0.1 (0.087±0.004)	4.0±0.1 (0.157±0.004)	1.3 (0.051)	0.25 (0.01)
CKP2520 (1008)	0.7 (0.028)	2.3±0.1 (0.091±0.004)	2.8±0.1 (0.110±0.004)	4.0±0.1 (0.157±0.004)	1.4 (0.055)	0.3 (0.012)
	0.9 (0.035)				1.4 (0.055)	
	1.1 (0.043)				1.7 (0.067)	
NM2012 (0805)	0.9 (0.035)	1.55±0.2 (0.061±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.3 (0.051)	0.3 (0.012)
NM2520 (1008)	0.9 (0.035)	2.3±0.1 (0.091±0.004)	2.8±0.1 (0.110±0.004)	4.0±0.1 (0.157±0.004)	1.4 (0.055)	0.3 (0.012)
	1.1 (0.043)				1.7 (0.067)	
LK2125 (0805)	1.25 (0.049)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	2.0 (0.079)	0.3 (0.012)
HK2125 (0805)	0.85 (0.033)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.5 (0.059)	0.3 (0.012)
	1.0 (0.039)				2.0 (0.079)	
BK2125 (0805)	1.25 (0.049)	1.5±0.2 (0.059±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	2.0 (0.079)	0.3 (0.012)
BK3216 (1206)	0.8 (0.031)	1.9±0.1 (0.075±0.004)	3.5±0.1 (0.138±0.004)	4.0±0.1 (0.157±0.004)	1.4 (0.055)	0.3 (0.012)
MCF0806 (0302)	0.4 (0.016)	0.75±0.05 (0.030±0.002)	0.95±0.05 (0.037±0.002)	2.0±0.05 (0.079±0.002)	0.55 (0.022)	0.3 (0.012)
MCF1210 (0504)	0.55 (0.022)	1.15±0.05 (0.045±0.002)	1.40±0.05 (0.055±0.002)	4.0±0.1 (0.157±0.004)	0.65 (0.026)	0.3 (0.012)
MCF2010 (0804)	0.45 (0.018)	1.1±0.1 (0.043±0.004)	2.3±0.1 (0.091±0.004)	4.0±0.1 (0.157±0.004)	0.85 (0.033)	0.3 (0.012)
MCKK1608 (0603)	1.0 (0.039)	1.1±0.1 (0.043±0.004)	1.95±0.1 (±0.004)	4.0±0.1 (0.157±0.004)	1.4 (0.055)	0.25 (0.01)
MCKK2012 (0805)	1.0 (0.039)	1.55±0.2 (0.061±0.008)	2.3±0.2 (0.091±0.008)	4.0±0.1 (0.157±0.004)	1.35 (0.053)	0.25 (0.010)

Unit : mm (inch)

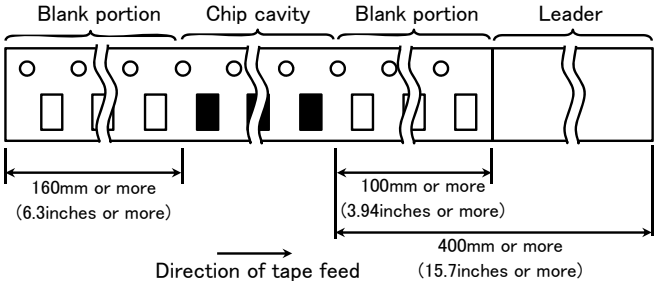
Embossed Tape (4mm wide)　　Unit : mm (inch)



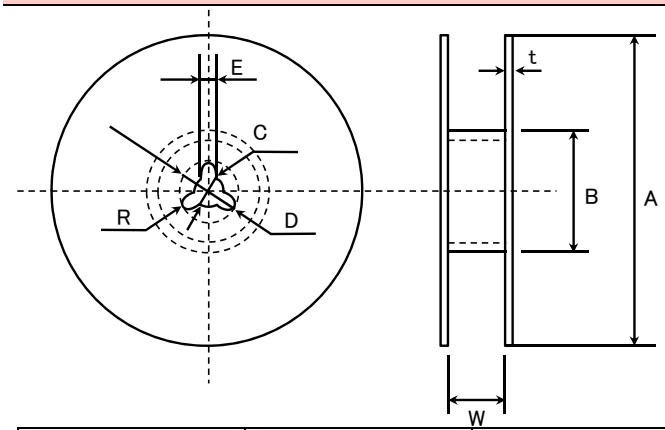
Type	Thickness mm (inch)	Chip cavity		Insertion Pitch	Tape Thickness	
		A	B	F	K	T
HKQ0402 (01005)	0.2 (0.008)	0.23	0.43	1.0±0.02	0.5max.	0.25max.

Unit : mm

④LEADER AND BLANK PORTION



⑤Reel Size



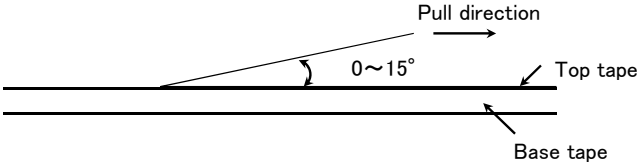
A	B	C	D	E	R
φ178±2.0	φ50 or more	φ13.0±0.2	φ21.0±0.8	2.0±0.5	1.0

	t	W
4mm width tape	1.5max.	5±1.0
8mm width tape	2.5max.	10±1.5

(Unit : mm)

⑥Top tape strength

The top tape requires a peel-off force of 0.1～0.7N in the direction of the arrow as illustrated below.



Multilayer chip inductors
Multilayer chip inductors for high frequency, Multilayer chip bead inductors
Multilayer common mode choke coils (MC series F type)
Metal Multilayer Chip Power Inductors (MCOIL™ MC series)

■RELIABILITY DATA

1. Operating Temperature Range			
Specified Value	BK0402		−55～＋125℃
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		−55～＋85℃
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		−40～＋85℃
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		−40～＋85℃
	CK2125		
	CKS2125		
	CKP1608		
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		
	LK1608		
	LK2125		
	HKQ0402		−55～＋125℃
	HK0603		
	HK1005		
	HK1608		−40～＋85℃
	HK2125		
	HKQ0603W/HKQ0603S/HKQ0603U		−55～＋125℃
	AQ105		
	MCFK1608		
	MCFE1608		−40～＋125℃ (Including self-generated heat)
	MCKK1608		
	MCHK2012		
	MCKK2012		

2. Storage Temperature Range			
Specified Value	BK0402		−55～＋125℃
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		−55～＋85℃
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		−40～＋85℃
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		−40～＋85℃
	CK2125		
	CKS2125		
	CKP1608		
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		
	LK1608		
	LK2125		
	HKQ0402		−55～＋125℃
	HK0603		
	HK1005		
	HK1608		−40～＋85℃
	HK2125		
	HKQ0603W/HKQ0603S/HKQ0603U		−55～＋125℃
	AQ105		
	MCFK1608		
	MCFE1608		−40～＋85℃
	MCKK1608		
	MCHK2012		
	MCKK2012		

3. Rated Current			
Specified Value	BK0402		150～750mA DC
	BK0603		100～500mA DC
	BK1005		120～1000mA DC
	BKH0603		115～450mA DC
	BKH1005		200～300mA DC
	BK1608		150～1500mA DC
	BK2125		200～1200mA DC
	ARRAY	BK2010	100mA DC
		BK3216	100～200mA DC
	BKP0402		0.55～1.1A DC
	BKP0603		0.8～1.8A DC
	BKP1005		0.8～2.4A DC
	BKP1608		1.0～3.0A DC
	BKP2125		1.5～4.0A DC
	MCF 0605		0.05A DC
	MCF 0806		0.1～0.13A DC
	MCF 1210		0.1～0.16A DC
	MCF 2010		0.1A DC
	CK1608		50～60mA DC
	CK2125		60～500mA DC
	CKS2125		110～280mA DC
	CKP1608		0.35～0.9A DC
	CKP2012		0.7～1.7A DC
	CKP2016		0.9～1.6A DC
	CKP2520		1.1～1.8A DC
	NM2012		1.0～1.2A DC
	NM2520		0.9～1.2A DC
	LK1005		20～25mA DC
	LK1608		1～150mA DC
	LK2125		5～300mA DC
	HK0603		60～470mA DC
	HK1005		110～300mA DC (−55～+125℃) 200～900mA DC (−55～+85℃)
	HK1608		150～300mA DC
	HK2125		300mA DC
	HKQ0402		100～500mA DC
	HKQ0603W		100～850mA DC
	HKQ0603S		130～600mA DC
	HKQ0603U		190～900mA DC
	AQ105		280～710mA DC
	MCFK1608		Idc1 : 1500～2300mA DC, Idc2 : 900～2100mA DC
	MCFE1608		Idc1 : 1400～2600mA DC, Idc2 : 800～1500mA DC
	MCKK1608		Idc1 : 2800～2000mA DC Idc2 : 1300～2600mA DC
	MCHK2012		Idc1 : 2260～4320mA DC, Idc2 : 1470～3600mA DC
	MCKK2012		Idc1 : 3600～6200mA DC, Idc2 : 2100～4000mA DC

Definition of rated current:

・In the CK, CKS and BK Series, the rated current is the value of current at which the temperature of the element is increased within 20℃.

・In the BK Series P type, CK Series P type, NM Series, the rated current is the value of current at which the temperature of the element is increased within 40℃.

・In the LK, HK, HKQ0603, and AQ Series, the rated current is either the DC value at which the initial L value is decreased within 5% with the application of DC bias, or the value of current at which the temperature of the element is increased within 20℃.

・In the HKQ0402(～9N1), the rated current is either the DC value at which the initial L value is decreased within 5% with the application of DC bias, or the value of current at which the temperature of the element is increased within 20℃.

・In the HKQ0402(10N～), the rated current is either the DC value at which the initial L value is decreased within 5% with the application of DC bias, or the value of current at which the temperature of the element is increased within 25℃.

・In the MC Series, Idc1 is the DC value at which the initial L value is decreased within 30% and Idc2 is the DC value at which the temperature of element is increased within 40℃ by the application of DC bias. (at 20℃)

4. Impedance			
Specified Value	BK0402		10～330Ω ±5Ω(10Ω), ±25%(Other)
	BK0603		10～1200Ω ±25%
	BK1005		10～1800Ω ±25%
	BKH0603		25～1500Ω ±25%
	BKH1005		600～1800Ω ±25%
	BK1608		22～2500Ω ±25%
	BK2125		15～2500Ω ±25%
	ARRAY	BK2010	5～1000Ω ±25%
		BK3216	60～1000Ω ±25%
	BKP0402		10～33Ω ±5Ω(10Ω)、±25%(Other)
	BKP0603		10～120Ω ±5Ω(10Ω), ±25%(Other)
	BKP1005		10～330Ω ±5Ω(EM100), ±25%(Other)
	BKP1608		33～470Ω ±25%
	BKP2125		33～330Ω ±25%
	MCF 0605		12～90Ω ±5Ω(12Ω), ±20%(35Ω90Ω),±25%(60Ω)
	MCF 0806		12～90Ω ±5Ω(12Ω), ±20%(47Ω90Ω),±25%(30Ω)
	MCF 1210		40～90Ω ±20%(2H900),±25%(Other)
	MCF 2010		90Ω ±25%
	CK1608		–
	CK2125		
	CKS2125		
	CKP1608		
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		
	LK1608		
	LK2125		
	HKQ0402		
	HK0603		
	HK1005		
	HK1608		
	HK2125		
	HKQ0603W/HKQ0603S/HKQ0603U		
	AQ105		
	MCFK1608		
	MCFE1608		
	MCKK1608		
	MCHK2012		
	MCKK2012		
Test Methods and Remarks	BK0402Series, BKP0402Series Measuring frequency : 100±1MHz Measuring equipment : E4991A(or its equivalent) Measuring jig : 16197A(or its equivalent) BK0603Series, BKP0603Series Measuring frequency : 100±1MHz Measuring equipment : 4291A(or its equivalent) Measuring jig : 16193A(or its equivalent) BK1005Series, BKP1005Series ,BKH1005Series Measuring frequency : 100±1MHz Measuring equipment : 4291A(or its equivalent) Measuring jig : 16192A(or its equivalent), 16193A(or its equivalent) BK1608・2125Series, BKP1608・2125Series Measuring frequency : 100±1MHz Measuring equipment : 4291A(or its equivalent), 4195A(or its equivalent) Measuring jig : 16092A(or its equivalent) or 16192A(or its equivalent)/HW BK2010・3216Series, MCF Series Measuring frequency : 100±1MHz Measuring equipment : 4291A(or its equivalent), 4195A(or its equivalent) Measuring jig : 16192A(or its equivalent)		

5. Inductance

Specified Value	BK0402		—
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		4.7～10.0 μH: ±20%
	CK2125		0.1～10.0 μH: ±20%
	CKS2125		1.0～10.0 μH: ±20%
	CKP1608		0.33～2.2 μH: ±20%
	CKP2012		0.47～4.7 μH: ±20%
	CKP2016		0.47～4.7 μH: ±20%
	CKP2520		0.47～4.7 μH: ±20%
	NM2012		0.82～1.0 μH: ±20%
	NM2520		1.0～2.2 μH: ±20%
	LK1005		0.12～2.2 μH: ±10 or 20%
	LK1608		0.047～33.0 μH: ±20%　0.10～12.0 μH: ±10%
	LK2125		0.047～33.0 μH: ±20%　0.10～12.0 μH: ±10%
	HK0603		1.0～6.2nH: ±0.3nH　6.8～100nH: ±5%
	HK1005		1.0～6.2nH: ±0.3nH　6.8～270nH: ±5%
	HK1608		1.0～5.6nH: ±0.3nH　6.8～470nH: ±5%
	HK2125		1.5～5.6nH: ±0.3nH　6.8～470nH: ±5%
	HKQ0402		0.5～3.9nH: ±0.1 or 0.2 or 0.3nH　4.3～5.6nH: ±0.3nH or 3% or 5% 6.2～47nH: ±3 or 5%
	HKQ0603W		0.6～3.9nH: ±0.1 or 0.2 or 0.3nH　4.3～6.2nH: ±0.2 or 0.3nH or 3 or 5% 6.8～30nH: ±3 or 5%　33～100nH: ±5%
	HKQ0603S		0.6～6.2nH: ±0.2 or 0.3nH　6.8～22nH: ±3 or 5%
	HKQ0603U		0.6～4.2nH: ±0.1 or 0.2 or 0.3nH　4.3～6.5nH: ±0.2 or 0.3nH　6.8～22nH: ±3 or 5%
	AQ105		1.0～6.2nH: ±0.3nH　6.8～15nH: ±5%
	MCFK1608		0.24～1.0 μH: ±20%
	MCFE1608		0.24～1.0 μH: ±20%
	MCKK1608		0.24～1.0 μH: ±20%
	MCHK2012		0.24～1.0 μH: ±20%
	MCKK2012		0.24～1.0 μH: ±20%

Test Methods and Remarks

CK、LK、CKP、NM、MC Series

- Measuring frequency : 2～4MHz(CK1608)
- Measuring frequency : 2～25MHz(CK2125)
- Measuring frequency : 2～10MHz(CKS2125)
- Measuring frequency : 10～25MHz(LK1005)
- Measuring frequency : 1～50MHz(LK1608)
- Measuring frequency : 0.4～50MHz(LK2125)
- Measuring frequency : 1MHz(CKP1608・CKP2012・CKP2016・CKP2520・NM2012・NM2520・MCFK1608・MCFE1608・MCHK2012・MCKK2012)
- Measuring equipment /jig :・4194A＋16085B＋16092A(or its equivalent)　・4195A＋41951＋16092A(or its equivalent)
  ・4294A＋16192A(or its equivalent)　・4291A＋16193A(or its equivalent)/LK1005
  ・4285A＋42841A＋42842C＋42851－61100(or its equivalent)/CKP1608・CKP2012・CKP2016・CKP2520・NM2012・NM2520・MCFK1608・MCFE1608・MCKK1608・MCHK2012・MCKK2012
- Measuring current :・1mA rms(0.047～4.7 μH)
  ・0.1mA rms(5.6～33 μH)

HK、HKQ、AQ Series

- Measuring frequency : 100MHz(HK0603・HK1005・AQ105)
- Measuring frequency : 50/100MHz(HK1608・HK2125)
- Measuring frequency : 500MHz(HKQ0603S・HKQ0603U)
- Measuring frequency : 300/500MHz(HKQ0603W)
- Measuring frequency : 100/500MHz(HKQ0402)
- Measuring equipment /jig :・4291A＋16197A(or its equivalent)/HK0603・AQ105
  ・4291A＋16193A(or its equivalent)/HK1005
  ・E4991A＋16197A(or its equivalent)/HKQ0603S・HKQ0603U・HKQ0603W
  ・4291A＋16092A ＋ in-house made jig(or its equivalent)/HK1608・HK2125
  ・E4991A＋16196D(or its equivalent)/HKQ0402

6. Q			
Specified Value	BK0402		—
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		—
	CK2125		
	CKS2125		
	CKP1608		
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		10～20 min.
	LK1608		10～35 min.
	LK2125		15～50 min.
	HK0603		4～5 min.
	HK1005		8 min.
	HK1608		8～12 min.
	HK2125		10～18 min.
	HKQ0402		3～8 min.
	HKQ0603W		6～15 min.
	HKQ0603S		10～13 min.
	HKQ0603U		14 min.
	AQ105		8 min.
	MCFK1608		—
	MCFE1608		
	MCKK1608		
	MCHK2012		
	MCKK2012		
Test Methods and Remarks	LK Series Measuring frequency : 10～25MHz(LK1005) Measuring frequency : 1～50MHz(LK1608) Measuring frequency : 0.4～50MHz(LK2125) Measuring equipment /jig :・4194A＋16085B＋16092A(or its equivalent) ・4195A＋41951＋16092A(or its equivalent) ・4294A＋16192A(or its equivalent) ・4291A＋16193A(or its equivalent)/LK1005 Measuring current ・1mA rms(0.047～4.7 μH) ・0.1mA rms(5.6～33 μH) HK、HKQ、AQ Series Measuring frequency : 100MHz(HK0603・HK1005・AQ105) Measuring frequency : 50/100MHz(HK1608・HK2125) Measuring frequency : 500MHz(HKQ0603S・HKQ0603U) Measuring frequency : 300/500MHz(HKQ0603W) Measuring frequency : 100/500MHz(HKQ0402) Measuring equipment /jig :・4291A＋16197A(or its equivalent)/HK0603・AQ105 ・4291A＋16193A(or its equivalent)/HK1005 ・E4991A＋16197A(or its equivalent)/HKQ0603S・HKQ0603U・HKQ0603W ・4291A＋16092A ＋ in-house made jig(or its equivalent)/HK1608, HK2125 ・E4991A＋16196D(or its equivalent)HKQ0402		

7. DC Resistance			
Specified Value	BK0402		0.07～1.2Ω max.
	BK0603		0.065～1.50Ω max.
	BK1005		0.03～0.90Ω max.
	BKH0603		0.26～3.20Ω max.
	BKH1005		0.85～2.00Ω max.
	BK1608		0.05～1.10Ω max.
	BK2125		0.05～0.75Ω max.
	ARRAY	BK2010	0.10～0.90Ω max.
		BK3216	0.15～0.80Ω max.
	BKP0402		0.05～0.15Ω max.
	BKP0603		0.030～0.180Ω max.
	BKP1005		0.0273～0.220Ω max.
	BKP1608		0.025～0.18Ω max.
	BKP2125		0.020～0.075Ω max.
	MCF 0605		2.5～5.0Ω max
	MCF 0806		1.5～5.0Ω max.
	MCF 1210		1.5～4.5Ω max.
	MCF 2010		4.5Ω max.
	CK1608		0.45～0.85Ω(±30%)
	CK2125		0.16～0.65Ω max.
	CKS2125		0.12～0.52Ω max.
	CKP1608		0.15～0.35Ω max.
	CKP2012		0.08～0.28Ω max.
	CKP2016		0.075～0.20Ω max
	CKP2520		0.05～0.16Ω max.
	NM2012		0.10～0.15Ω max.
	NM2520		0.11～0.22Ω max.
	LK1005		0.41～1.16Ω max.
	LK1608		0.2～2.2Ω max.
	LK2125		0.1～1.1Ω max.
	HK0603		0.11～3.74Ω max.
	HK1005		0.08～4.8Ω max.
	HK1608		0.05～2.6Ω max.
	HK2125		0.10～1.5Ω max.
	HKQ0402		0.08～5.0Ω max.
	HKQ0603W		0.07～4.1Ω max.
	HKQ0603S		0.06～1.29Ω max.
	HKQ0603U		0.06～1.29Ω max.
	AQ105		0.07～0.45Ω max.
	MCFK1608		0.050～0.224Ω max.
	MCFE1608		0.100～0.340Ω max.
	MCKK1608		0.038～0.123Ω max.
	MCHK2012		0.024～0.111Ω max.
	MCKK2012		0.025～0.090Ω max.
Test Methods and Remarks	Measuring equipment：VOAC-7412, VOAC-7512, VOAC-7521（made by Iwasaki Tsushinki）, HIOKI3227 (or its equivalent)		

8. Self Resonance Frequency (SRF)			
Specified Value	BK0402		—
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		17～25MHz min.
	CK2125		24～235MHz min.
	CKS2125		24～75MHz min.
	CKP1608		—
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		40～180MHz min.
	LK1608		9～260MHz min.
	LK2125		13～320MHz min.
	HK0603		900～10000MHz min.
	HK1005		400～10000MHz min.
	HK1608		300～10000MHz min.
	HK2125		200～4000MHz min.
	HKQ0402		1200～10000MHz min.
	HKQ0603W		800～10000MHz min.
	HKQ0603S		1900～10000MHz min.
	HKQ0603U		1900～10000MHz min.
	AQ105		2300～10000MHz min.
	MCFK1608		—
	MCFE1608		
	MCKK1608		
	MCHK2012		
	MCKK2012		
Test Methods and Remarks	LK、CK Series : Measuring equipment : 4195A (or its equivalent) Measuring jig : 41951＋16092A (or its equivalent) HK、HKQ、AQ Series : Measuring equipment : 8719C (or its equivalent)・8753D (or its equivalent)/HK2125		

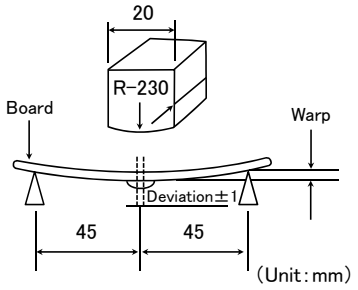
9. Temperature Characteristic			
Specified Value	BK0402		—
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		
	CK2125		
	CKS2125		
	CKP1608		
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		
	LK1608		
	LK2125		
	HK0603		Inductance change : Within ±10%
	HK1005		
	HK1608		
	HK2125		
	HKQ0402		
	HKQ0603W		
	HKQ0603S		
	HKQ0603U		
	AQ105		
	MCFK1608		
	MCFE1608		
	MCKK1608		
	MCHK2012		
	MCKK2012		
Test Methods and Remarks	HK、HKQ、AQ Series: Temperature range : −30～+85℃ Reference temperature : +20℃ MC Series: Temperature range : −40～+85℃ Reference temperature : +20℃		

10. Resistance to Flexure of Substrate

Specified Value	BK0402		No mechanical damage.
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		
	CK2125		
	CKS2125		
	CKP1608		
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		
	LK1608		
	LK2125		
	HK0603		
	HK1005		
	HK1608		
	HK2125		
	HKQ0402		
	HKQ0603W		
	HKQ0603S		
	HKQ0603U		
	AQ105		
	MCFK1608		
	MCFE1608		
	MCKK1608		
	MCHK2012		
	MCKK2012		

Test Methods and Remarks

Warp : 2mm(BK Series without 0402size、BKP、BKH1005、CK、CKS、CKP、LK、HK、HKQ0603S、HKQ0603U、AQ Series、MCF1210、MC Series)
: 1mm(BK0402、BKP0402、BKH0603、HKQ0402、HKQ0603W、MCF Series without 1210 size,)
Testing board : glass epoxy-resin substrate
Thickness : 0.8mm



11. Solderability		
Specified Value	BK0402 BK0603 BK1005 BKH0603 BKH1005 BK1608 BK2125 ARRAY: BK2010 ARRAY: BK3216 BKP0402 BKP0603 BKP1005 BKP1608 BKP2125 MCF 0605 MCF 0806 MCF 1210 MCF 2010 CK1608 CK2125 CKS2125 CKP1608 CKP2012 CKP2016 CKP2520 NM2012 NM2520 LK1005 LK1608 LK2125 HK0603 HK1005 HK1608 HK2125 HKQ0402 HKQ0603W HKQ0603S HKQ0603U AQ105 MCFK1608 MCFE1608 MCKK1608 MCHK2012 MCKK2012	At least 90% of terminal electrode is covered by new solder.
Test Methods and Remarks	Solder temperature :230±5℃ (JIS Z 3282 H60A or H63A) Solder temperature :245±3℃ (Sn/3.0Ag/0.5Cu) Duration :4±1 sec.	

12. Resistance to Soldering			
Specified Value	BK0402		Appearance：No significant abnormality Impedance change：Within ±30%
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		Appearance：No significant abnormality Impedance change：Within ±20%
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		Appearance：No significant abnormality Inductance change R10～4R7： Within ±10% 6R8～100： Within ±15% CKS2125 ： Within ±20% CKP1608、CKP2012、CKP2016、CKP2520、NM2012、NM2520： Within ±30%
	CK2125		
	CKS2125		
	CKP1608		
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		Appearance：No significant abnormality Inductance change： Within ±15%
	LK1608		Appearance：No significant abnormality Inductance change 47N～4R7： Within ±10% 5R6～330： Within ±15%
	LK2125		
	HK0603		Appearance：No significant abnormality Inductance change： Within ±5%
	HK1005		
	HK1608		
	HK2125		
	HKQ0402		
	HKQ0603W		
	HKQ0603S		
	HKQ0603U		
	AQ105		
	MCFK1608		Appearance：No significant abnormality Inductance change： Within ±10%
	MCFE1608		
	MCKK1608		
	MCHK2012		
	MCKK2012		
Test Methods and Remarks	Solder temperature	：260±5℃	
	Duration	：10±0.5 sec.	
	Preheating temperature	：150 to 180℃	
	Preheating time	：3 min.	
	Flux	：Immersion into methanol solution with colophony for 3 to 5 sec.	
	Recovery	：2 to 3 hrs of recovery under the standard condition after the test.(See Note 1)	
(Note 1) When there are questions concerning measurement result；measurement shall be made after 48±2 hrs of recovery under the standard condition.			

13. Thermal Shock

Specified Value	BK0402		Appearance：No significant abnormality Impedance change： Within ±30%
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		Appearance：No significant abnormality Impedance change： Within ±20%
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		Appearance：No significant abnormality Inductance change：Within ±20% Q change：Within ±30%
	CK2125		
	CKS2125		Appearance：No significant abnormality Inductance change：Within ±20%
	CKP1608		Appearance：No significant abnormality Inductance change： Within ±30%
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		Appearance：No significant abnormality Inductance change： Within ±10% Q change： Within ±30%
	LK1608		
	LK2125		
	HK0603		Appearance：No significant abnormality Inductance change： Within ±10% Q change： Within ±20%
	HK1005		
	HK1608		
	HK2125		
	HKQ0402		
	HKQ0603W		
	HKQ0603S		
	HKQ0603U		
	AQ105		
	MCFK1608		Appearance：No significant abnormality Inductance change： Within ±10%
	MCFE1608		
	MCKK1608		
	MCHK2012		
	MCKK2012		

Test Methods and Remarks

Conditions for 1 cycle

Step	temperature(℃)	time(min.)
1	Minimum operating temperature +0/−3	30±3
2	Room temperature	2～3
3	Maximum operating temperature +3/−0	30±3
4	Room temperature	2～3

Number of cycles：5

Recovery：2 to 3 hrs of recovery under the standard condition after the test.(See Note 1)

(Note 1) When there are questions concerning measurement result；measurement shall be made after 48±2 hrs of recovery under the standard condition.

14. Damp Heat(Steady state)			
Specified Value	BK0402		Appearance:No significant abnormality Impedance change: Within ±30%
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	MCF 0605		Appearance:No significant abnormality Impedance change: Within ±20%
	MCF 0806		
	MCF 1210		
	MCF 2010		
	CK1608		Appearance:No significant abnormality Inductance change: Within ±20% Q change: Within ±30%
	CK2125		
	CKS2125		Appearance:No significant abnormality Inductance change: Within ±20%
	CKP1608		Appearance:No significant abnormality Inductance change: Within ±30%
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		Appearance:No significant abnormality Inductance change: Within ±10% Q change: Within ±30%
	LK1608		
	LK2125		Appearance:No significant abnormality Inductance change: Within ±20% Q change: Within ±30%
	HK0603		Appearance:No significant abnormality Inductance change: Within ±10% Q change: Within ±20%
	HK1005		
	HK1608		
	HK2125		
	HKQ0402		
	HKQ0603W		
	HKQ0603S		
	HKQ0603U		
	AQ105		
	MCFK1608		Appearance:No significant abnormality Inductance change: Within ±10%
	MCFE1608		
	MCKK1608		
	MCHK2012		
	MCKK2012		
Test Methods and Remarks	BK、BKP、BKH、LK、CK、CKS、CKP、NM Series、MCF Series: Temperature :40±2℃ Humidity :90 to 95%RH Duration :500 +24/−0 hrs Recovery :2 to 3 hrs of recovery under the standard condition after the removal from test chamber.(See Note 1) HK、HKQ、AQ、MC Series: Temperature :60±2℃ Humidity :90 to 95%RH Duration :500 +24/−0 hrs Recovery :2 to 3 hrs of recovery under the standard condition after the removal from test chamber.(See Note 1)		

(Note 1) When there are questions concerning measurement result;measurement shall be made after 48±2 hrs of recovery under the standard condition.

15. Loading under Damp Heat			
Specified Value	BK0402		Appearance：No significant abnormality Impedance change： Within ±30%
	BK0603		
	BK1005		
	BKH0603		
	BKH1005		
	BK1608		
	BK2125		
	ARRAY	BK2010	
		BK3216	
	BKP0402		
	BKP0603		
	BKP1005		
	BKP1608		
	BKP2125		
	CK1608		Appearance：No significant abnormality Inductance change： Within ±20% Q change： Within ±30%
	CK2125		
	CKS2125		Appearance：No significant abnormality Inductance change： Within ±20%
	CKP1608		Appearance：No significant abnormality Inductance change： Within ±30%
	CKP2012		
	CKP2016		
	CKP2520		
	NM2012		
	NM2520		
	LK1005		Appearance：No significant abnormality Inductance change： Within ±10% Q change： Within ±30%
	LK1608		Appearance：No significant abnormality Inductance change： 0.047～12.0 μH： Within ±10% 15.0～33.0 μH： Within ±15% Q change： Within ±30%
	LK2125		Appearance：No significant abnormality Inductance change： Within ±20% Q change： Within ±30%
	HK0603		Appearance：No significant abnormality Inductance change： Within ±10% Q change： Within ±20%
	HK1005		
	HK1608		
	HK2125		
	HKQ0402		
	HKQ0603W		
	HKQ0603S		
	HKQ0603U		
	AQ105		
	MCFK1608※		Appearance：No significant abnormality Inductance change： Within ±10%
	MCFE1608※		
	MCKK1608※		
	MCHK2012※		
	MCKK2012※		
Test Methods and Remarks	BK、BKP、BKH、LK、CK、CKS、CKP、NM Series： Temperature ：40±2℃ Humidity ：90 to 95%RH Applied current ：Rated current Duration ：500 +24/−0 hrs Recovery ：2 to 3 hrs of recovery under the standard condition after the removal from test chamber.(See Note 1) HK、HKQ、AQ、MC Series： Temperature ：60±2℃ Humidity ：90 to 95%RH Applied current ：Rated current ※MC series ; Idc2max Duration ：500 +24/−0 hrs Recovery ：2 to 3 hrs of recovery under the standard condition after the removal from test chamber.(See Note 1)		

Note on standard condition: "standard condition" referred to herein is defined as follows:
5 to 35℃ of temperature, 45 to 85% relative humidity, and 86 to 106kPa of air pressure.
When there are questions concerning measurement results:
In order to provide correlation data, the test shall be conducted under condition of 20±2℃ of temperature, 60 to 70% relative humidity, and 86 to 106kPa of air pressure.
Unless otherwise specified, all the tests are conducted under the "standard condition."
(Note 1) Measurement shall be made after 48±2 hrs of recovery under the standard condition.