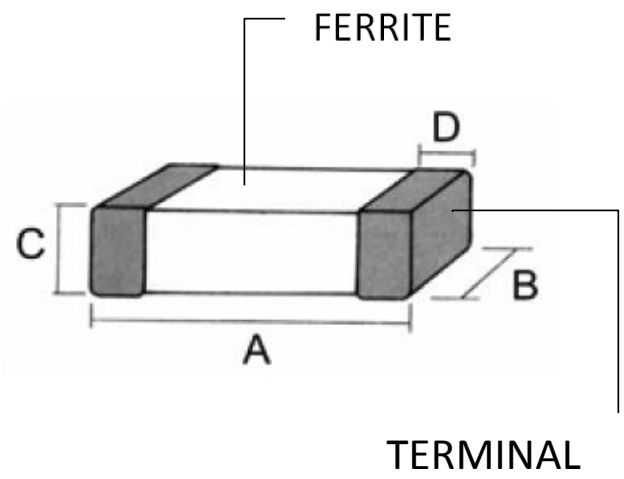
Specification For Approval

AXIS POWER 經軸電子

Multilayer chip bead 1608 (0603) series

SHAPES		ELECTRICAL CHARACTERISTIC	
		Z± 25%	10 Ω ~ 600 Ω
		DCR (Ω) MAX.	0.030 Ω ~0.300 Ω
		RATED CURRENT (A) MAX.	1.0 A ~ 4.0 A
DIMENSIONS		**TEST FREQUENCY**	
A m/m	1.6 ± 0.2	100 MHz ／ 0.5V	
B m/m	0.8 ± 0.2		
C m/m	0.8 ± 0.2	**TEST EQUIPMENT**	
D m/m	0.3 ± 0.2	HP-4438A MILLIOHMMETER HP-4291A IMPEDANCE ANALYZER	

ORDERING CODE：

BCCB－XXXX□－XXX□

(1) (2) (3) (4) (5)

(1) Product Code

(2) Dimensions

(3) Material Code

E1：Standard Speed E2：High Speed ES：High Current

(4) Impedance

(5) Taping

L：1000mA N：2000mA P：2500mA Q：3000mA

R：4000mA U：5000mA W：6000mA

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PRODUCT INSPECTION SPECIFICATIONS

FINISHED PRODUCT INSPECTIONS

Inspection Item	Sampling Plan	AQL	Inspection Equipment
L/Z	MIL-STD-105E LII (Normal Inspection)	0.1	HP4291A/B
Q	MIL-STD-105E LII (Normal Inspection)	0.1	
DCR	MIL-STD-105E LII (Normal Inspection)	0.015	HP4338A/B
OPEN	Q'ty.×3 %	c=0	HP4338A/B
Dimension	n=20	c=0	Calipers
Appearance	MIL-STD-105E LII (Normal Inspection)	0.1	Inspection Machine 8X/50X Magnifier 100X Microscope

TAPE & REEL INSPECTIONS

Inspection Item	Sampling Plan	AQL	Inspection Equipment
Peeling Force	One Reel Per Lot	c=0	Peeling Force Tester
Reel(Quantity)	Full Inspection	c=0	Visual
P/N Label	Full Inspection	c=0	Visual

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Part Number	Impedance (Ω) ±25% At 100MHz	DC Resistance (Ω) MAX.	Rated Current (A) MAX.
BCCB-1608ES-100R	10	0.03	4
BCCB-1608ES-190Q	19	0.04	3
BCCB-1608ES-300Q	30	0.05	3
BCCB-1608ES-600Q	60	0.05	3
BCCB-1608ES-800Q	80	0.04	3
BCCB-1608ES-121P	120	0.10	2.5
BCCB-1608ES-221N	220	0.15	2
BCCB-1608ES-301N	300	0.15	2
BCCB-1608ES-331N	330	0.10	2
BCCB-1608ES-601L	600	0.30	1
BCCB-1608ES-152K	1500	0.50	0.5

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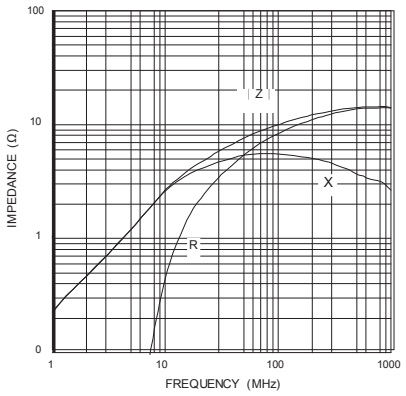
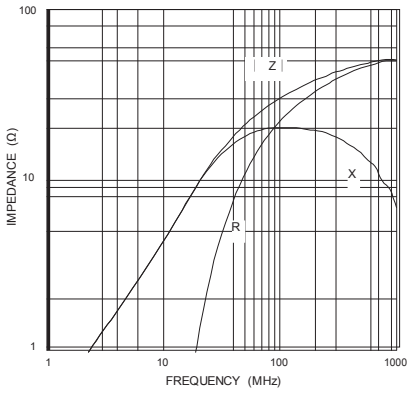
IMPEDANCE VS. FREQUENCY CHARACTERISTIC

TEST INSTRUMENT :
HP 4291A RF IMPEDANCE/MATERIAL ANALYZER

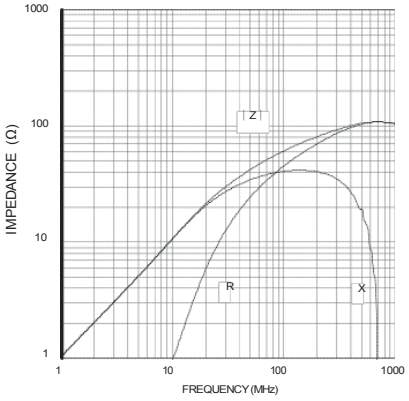
BCCB-1608ES-100R



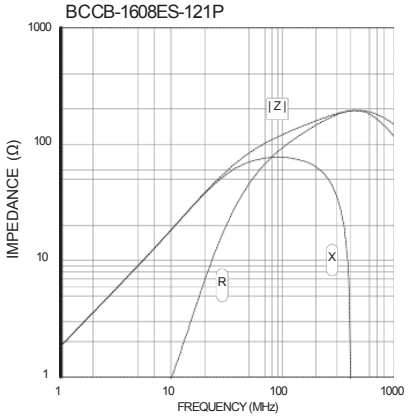
BCCB-1608ES-300Q



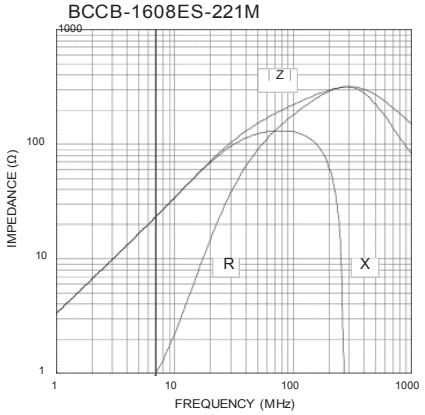
BCCB-1608ES-600Q



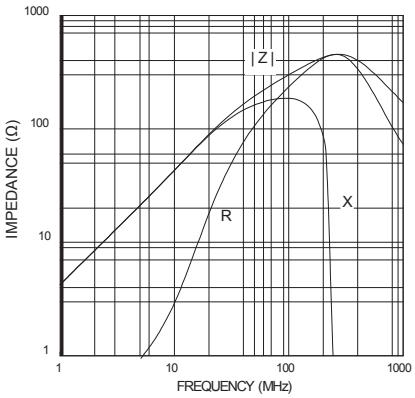
BCCB-1608ES-121P



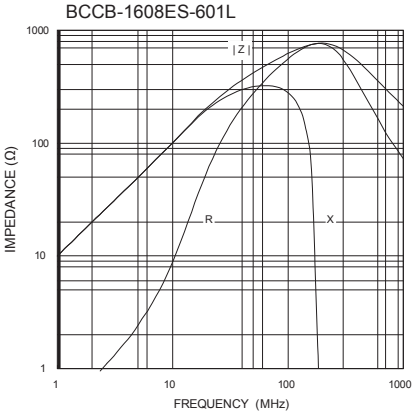
BCCB-1608ES-221M



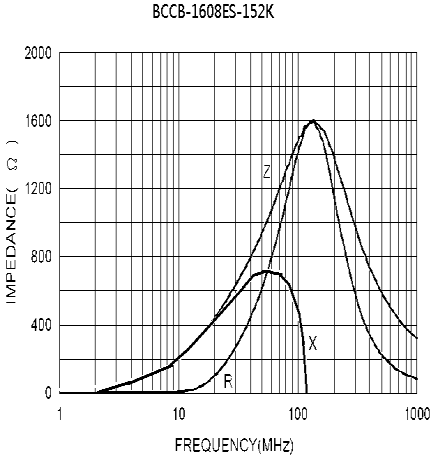
BCCB-1608ES-301M



BCCB-1608ES-601L



BCCB-1608ES-152K



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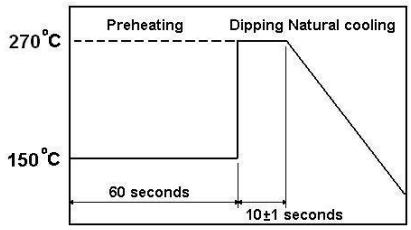
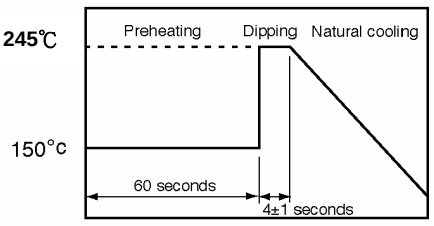
AXIS POWER 經軸電子

Multilayer chip bead 1608 (0603) series

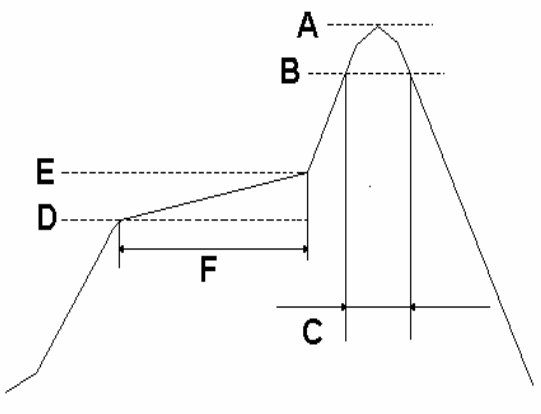
RELIABILITY TEST

Item	Performance	Test condition
Operating temperature range	-55 °C to + 125 °C	
Storage temperature and umidity ranges	40 °C MAX., 70% RH MAX.	
Soldering heat resistance	The chip shall not be cracks. More than 75% of terminal electrode shall be covered with solder.	Preheat: 150 °C, 60 seconds Solder temperature : 270 ± 5 °C Flux: Rosin Dip time: 10 ± 1 seconds 
Solderability	More than 90% of the terminal electrode shall be covered with new solder.	Preheat: 150 °C, 60 seconds Solder temperature: 245 ± 5 °C Flux: Rosin Dip time: 4 ± 1 seconds 

Recommended Soldering Conditions

(REFLOW TEMPERATURE PROFILE) Lead-Free

A	*260 ± 5℃*
B	*230 ± 5℃*
C	*30 ±10 sec*
D	*150℃*
E	*180℃*
F	*90 ± 30sec*



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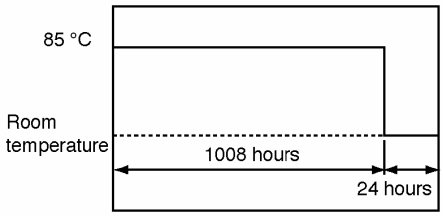
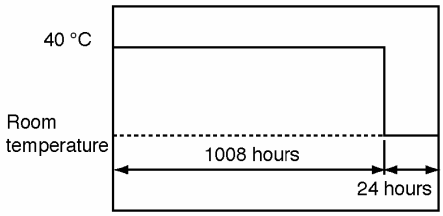
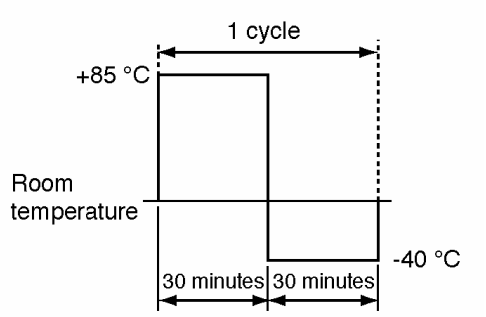
Multilayer chip bead 1608 (0603) series

RELIABILITY TEST

Item	Performance	Test condition
High temperature resistance	Appearance: Ferrite shall not be damaged. Impedance: Within±20% of the initial value.	Temperature: 85±2℃ Testing time: 1008±12 hours Measurement: After placing for 24 hours min. 
Humidity resistance	Appearance: Ferrite shall not be damaged. Impedance: Within±20% of the initial value	Humidity: 90 to 95% RH Temperature: 40±2℃ Testing time: 1008±12 hours Measurement: After placing for 24 hours min. 
Thermal Shock	Appearance: Cracking, chipping or any other defects harmful to the characteristics shall not be allowed. Impedance: Within±20% of the initial value	Temperature: -40℃, +85℃, kept stabilized for 30 minutes each Cycle: 100 cycles Measurement: After placing for 24 hours min. 

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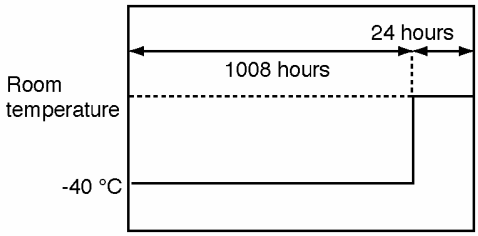
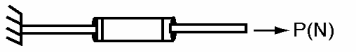
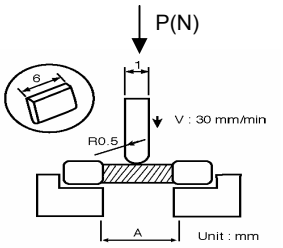
AXIS POWER 經軸電子

Multilayer chip bead 1608 (0603) series

RELIABILITY TEST

Item	Performance	Test condition
Low temperature storage life test	Appearance: Cracking, chipping or any other defects harmful to the characteristics shall not be allowed. Impedance: Within±20% of the initial value.	Temperature: -40±2℃ Testing time: 1008±12 hours Measurement: After placing for 24 hours min. 
Terminal strength	The terminal electrode and the body shall not be damaged by the forces applied on the right conditions. 	Type / P (kgf) / Time (s) BCCB-1005☐ 0.3 BCCB-1608☐ 0.5 BCCB-2012☐ 0.6~0.8 BCCB-3216☐ 1.0 30 ± 5
Bending strength	The body shall not be damaged by the forces applied on the right conditions. 	Type / A (mm) / P (kgf) BCCB-1608☐ 1.0 0.5 BCCB-2012☐ 1.4 1.0 BCCB-3216☐ 2.0 2.0

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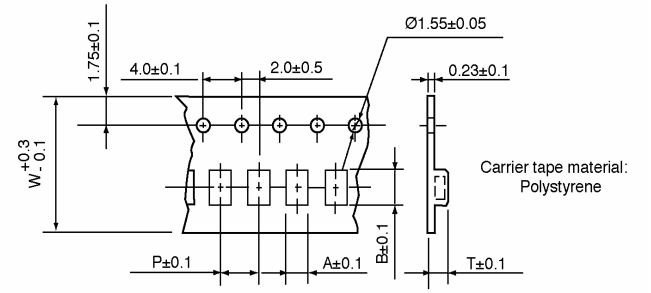
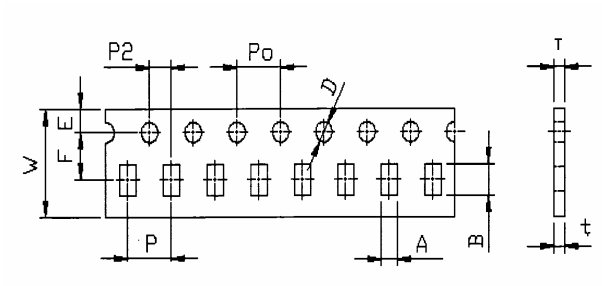
- Tape dimensions and packaging quantities

Carrier tape material: paper

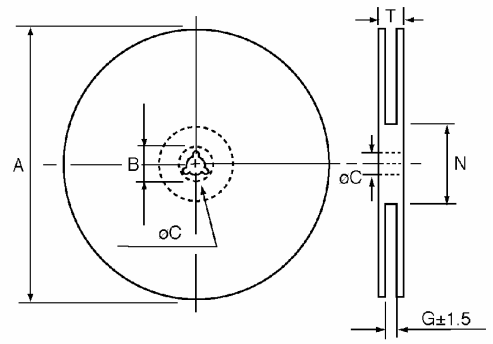




material: Paper (Dimensions in mm)						
TYPE	A	B	W	P	T	CHIPS / REEL
BCCB-1005□	0.62	1.12	8	2	0.60	10000
BCCB-1608□	1.10	1.90	8	4	0.95	4000
BCCB-2012□	1.50	2.30	8	4	0.95	4000
material: Polystyrene (Dimensions in mm)						
TYPE	A	B	W	P	T	CHIPS / REEL
BCCB-1608□	1.01	1.80	8	4	1.02	4000
BCCB-2012□	1.42	2.25	8	4	1.04	4000
BCCB-3216□	1.88	3.50	8	4	1.27	3000

- Reel dimensions

Material:Paper, Plastic



Dimensions in mm

TYPE	8mm	12mm
A	178±2	178±2
B	21.0±0.8	21.0±0.8
C	13.0±0.8	13.0±0.8
G	10.0	14.0
N	75	75
T	12.5	16.5