Specification For Approval

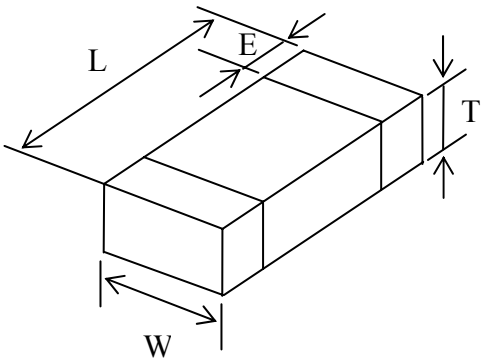
AXIS POWER 經軸電子

Multilayer chip bead 1005 (0402) series

PRODUCT DETAIL

Electrical Characteristics			Test Instruments
Z	Ω (Ref. Page 2)	TEST FREQ: (Ref. Page 2) MHz TEST LEVEL: 100 mV	•HP4291B RF IMPEDANCE / MATERIAL ANALYZER •HP4338A/B MILLIOHMMETER •ABM 8306D DC POWER SUPPLY
θ	NA		
SRF	NA		
DCR	Ω (Ref. Page 2)		
IDC	mA (Ref. Page 2)		

SHAPES AND DIMENSIONS



Unit: mm

TYPE	1005
L	1.0±0.10
W	0.5±0.10
T	0.5±0.10
E	0.25±0.1

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AXIS POWER 經軸電子

PART NUMBER AND CHARACTERISTICS TABLE

BCCB -1005ES SERIES

Part No.	Impedance(Ω) +/- 25%	Test Freq.(MHz)	DCR(Ω) (Max.)	Rated Current (mA)
BCCB-1005ES-300T	30	100	0.100	2000
BCCB-1005ES-600T	60	100	0.150	1500
BCCB-1005ES-121T	120	100	0.095	2000
BCCB-1005ES-221T	220	100	0.150	1500

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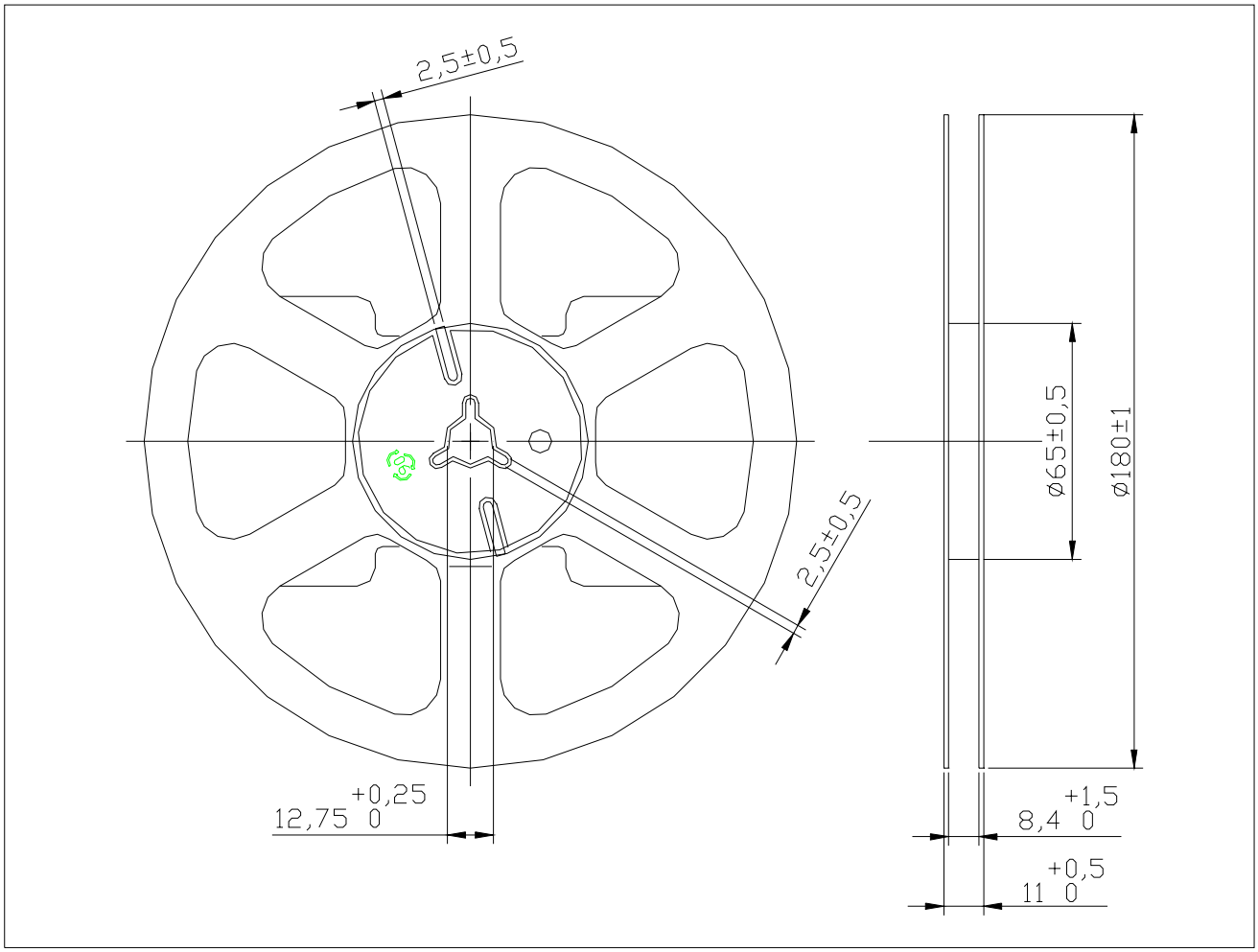
AXIS POWER 經軸電子

REEL DIMENSIONS

Unit: mm



Reel Packaging Quantity									
PART SIZE		**1005**	**1608**	**201209**	**201212**	**3216**	**3225**	**4516**	**4532**
7” REEL	Qty. (pcs)	10,000	4,000	4,000	3,000	3,000	2,000	2,000	1,000
13” REEL		NA	NA	10,000	10,000	10,000	5,000	5,000	2,500
BULK		20,000	20,000	20,000	20,000	20,000	10,000	10,000	10,000

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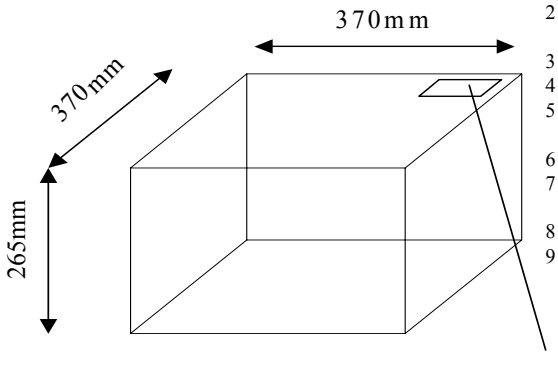
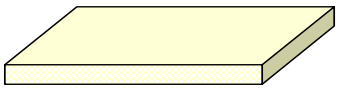
PACKING

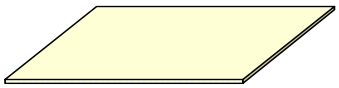
Carton size	L*W*H (mm)	Loading Quantity 7” (reels)	Loading quantity 13” (reels)
L	370*370*265	40	12
M	370*370*133	20	5
S	370*200*133	20	-



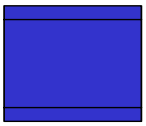
1. Put taped reel in an anti-static bag.
2. Put desiccant in an anti-static bag, and seal the anti-static bag by heat pressing.
3. Put the styrofoam in the bottom and around the box.
4. Put 4 reels which was packed as step 2 in one layer.
5. Then, put the stiffener on the top of those four reels as an isolation on between layer and layer.
6. Repeat step 4 and 5 until there is 10 layers in one box.
7. Before sealing the box, put the styrofoam on the top. Then, using adhesive tape to seal the box.
8. Stick the shipment label on the top of the box.
9. Recommended storage temperature:
   Temp : -40℃ to +85 ℃
   Humidity : 70% RH Max.



Styrofoam: X 6 (350mm*350mm*15mm)



Stiffener: X 10 (340*340mm)



Taped reel + desiccant + anti-static bag: X 40

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AXIS POWER 經軸電子

Leaching	The chip should not crack ; More than 90% of the terminal electrode should be covered with solder , free from defects, chip body should not exposed.	1.Solder: Alpha Sn100 2.Solder Temp: 260 ±5℃ 3.Flux: Rosin 4.Dip time: 10 ±1 sec
Solderability 1 (IR Re-flow test)	1.Sn cover area need to over half thickness of chip 2.Chip shift distance under 50% of width 3.No short , open ,…etc defect symptom	1.Solder: M705-GRN360-K2-V Sn96.5/Ag3/Cu0.5 2.General:135/135/195/235℃ 3.100%TIN:155/155/220/265℃
Solderability 2	More than 90% of the terminal electrode should be covered with new solder	1.Solder: Alpha Sn100 2.Solder Temp.:230 ±5℃ 3.Flux: Rosin 4.Dip time: 4±1 sec
Terminal Strength	The terminal electrode should not break off nor the ferrite damaged	100505>0.2kgt, 160808>0.3kgt, 201209>0.6kgt, 201212>0.6kgt, 321611>1.0kgt, 322513>1.0kgt, 451616>1.0kgt, 453215>1.5kgt, BCCBA3216>1.2kgt ; pulling time:30 ±5 sec
Bending Strength	The ferrite should not be damaged by force applied on the right	100505>0.2kgf, 160808>0.3kgf, 201209>1.0kgf, 201212>1.0kgf, 321611>2.0kgf, 322513>2.5kgf, 451616>2.5kgf, 453215>2.5kgf, BCCBA3216>2.0kgf
Flexure Strength	No mechanical damage shall be noticed even when the board is bent 2 mm (0.079 inches)	1.At ambient temperature & Humidity 2.To bend 2 mm
Thermal Shock	1.No mechanical damage 2.Inductance should be within ±5% of the initial value 3.Q value should be within ±30% of the initial value 4.Impedance value should be	1.Temperature:-40 ~ 85℃ For 30 minutes each 2.Cycle: 100 cycles 3.Measurement: At ambient temperature 24 hours After test completion

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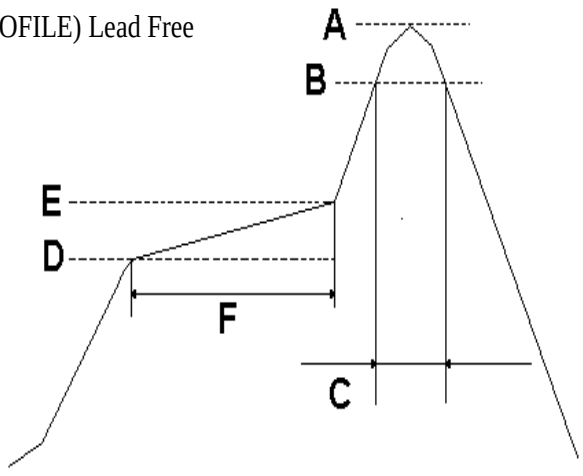
	within ±20% of the initial value	
Temperature Cycling	1.No mechanical damage 2.Inductance should be within ±5% of the initial value 3.Q value should be within ±30 % of the initial value 4.Impedance value should be within ±20% of the initial value	1. Temperature:-40~125 ℃ 2. Cycle: 100 cycles 3. Measurement: At ambient temperature 24 hours After test completion
Biased Humidity	1.No mechanical damage 2.Inductance should be within ±5% of the initial value 3.Q value should be within ±30 % of the initial value 4.Impedance value should be within ±20% of the initial value	1.Temperature: 40℃ 2.Humidity: 85 % RH 3.Applied current: Full rated current 4.Testing time: 1000 hrs 5. Measurement: At ambient temperature 24 hours After test completion
Rated Current	1.BCCB / BCCL / BCCLH product Surface temperature below room temperature plus 10 ℃ 2.High current DC power (ES) product surface temp. below room temperature plus 40 ℃	1.At ambient temperature & humidity 2.Testing time:5 minutes (under full rated current)

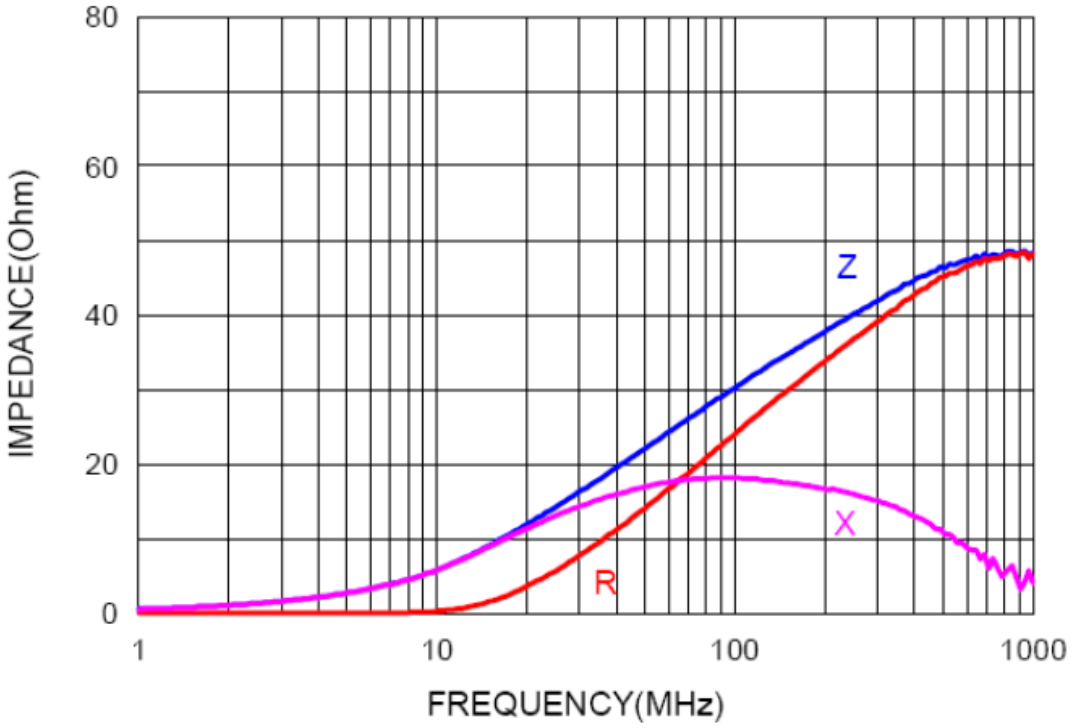
Recommended Soldering Conditions

(REFLOW TEMPERATURE PROFILE) Lead Free

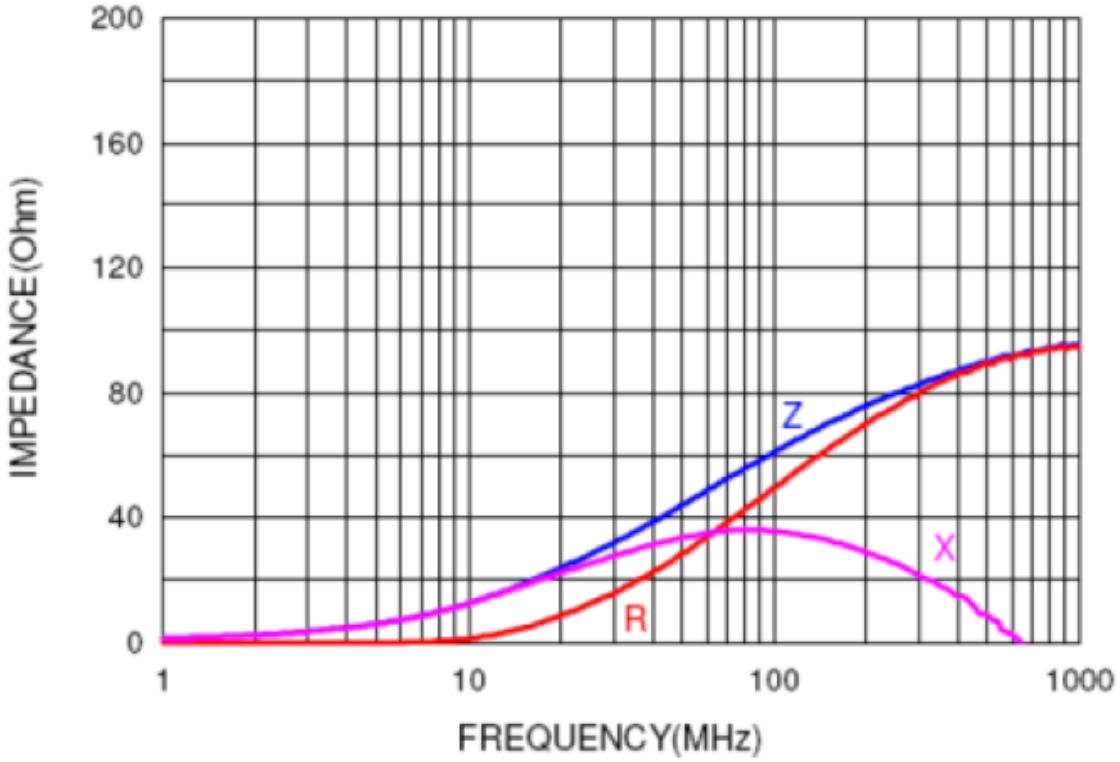
A	*260 ± 5℃*
B	*230± 5℃*
C	*30±10sec*
D	*150℃*
E	*180℃*
F	*90±30sec*



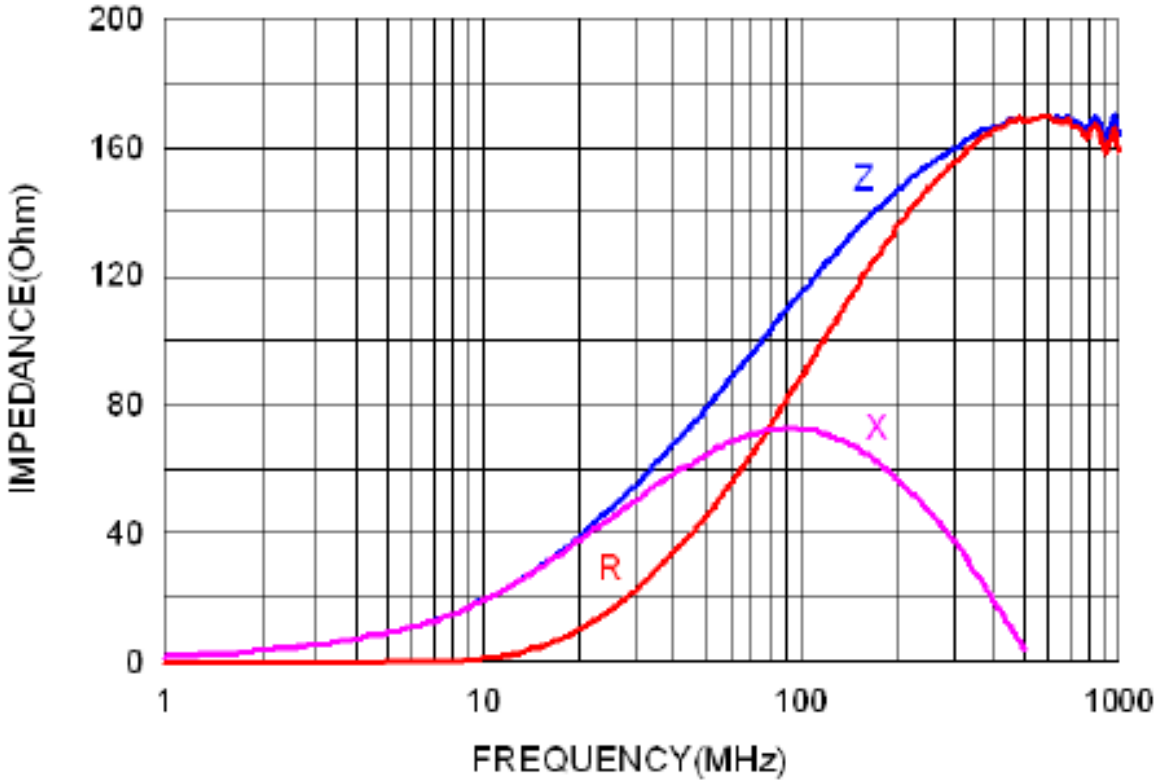
BCCB-1005ES-300T



BCCB-1005ES-600T



BCCB-1005ES-121T



BCCB-1005ES-221T