

SPECIFICATION (APPEARANCE)

(R-0)

CE151-IN-xxxxxS

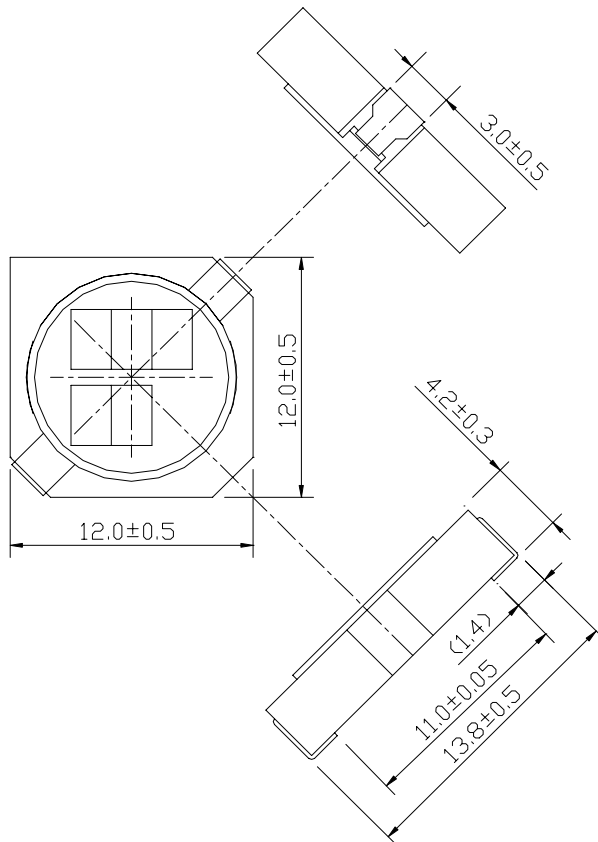
Part Name

CHIP CHOKE COIL (ELLCTV TYPE)

7 - 1

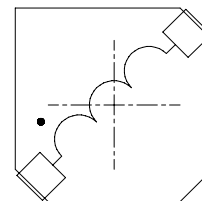
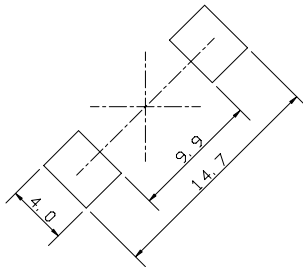
APPEARANCE & DIMENSIONS (UNIT MM)

For Reference only



RECOMMENDED LAND PATTERNS (TOP VIEW)

CONNECTIONS (TOP VIEW)



PART NUMBER

PANASONIC'S P/N

E L L C V M
 1 2 3 4

1	Height	T: 4.25 ±0.25mm		
2	Inductance	2.7μH: 2R7	22μH: 220	100μH: 101
3	Tolerance	M: ±20%	N: ±30%	
4	Customer division			

Date 26-Jul-12

CCBG COIL DEPARTMENT

APPROVED
MICHAEL

CHECKED
CHIOU LIU

PREPARED
MENG HONG

SPECIFICATION

CE151-IN-xxxxxS

Part Name

CHIP CHOKE COIL (ELLCTV TYPE)

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ELECTRICAL CHARACTERISTICS

CUSTOMER'S PART NUMBER	PANASONIC'S PART NUMBER	INDUCTANCE		DCR(20°C)		*RATED CURRENT [mA]	MARKING
		NOMINAL [μH]	TOL.	NOMINAL [Ω]	TOL.		
ELLCTV1R2N	ELLCTV1R2N	1.2	±30%	4.6mΩ		6500	1R2
ELLCTV2R0N	ELLCTV2R0N	2.0		5.6mΩ		6300	2R0
ELLCTV2R7N	ELLCTV2R7N	2.7		7.0mΩ		5700	2R7
ELLCTV3R9N	ELLCTV3R9N	3.9		8.5mΩ		5600	3R9
ELLCTV4R7N	ELLCTV4R7N	4.7		9.9mΩ		5200	4R7
ELLCTV5R6N	ELLCTV5R6N	5.6		11mΩ		4900	5R6
ELLCTV6R8N	ELLCTV6R8N	6.8		14mΩ		4500	6R8
ELLCTV8R2N	ELLCTV8R2N	8.2		15mΩ		4400	8R2
ELLCTV100M	ELLCTV100M	10	±20%	17mΩ	±20%	3900	100
ELLCTV120M	ELLCTV120M	12		22mΩ		3700	120
ELLCTV150M	ELLCTV150M	15		25mΩ		3100	150
ELLCTV180M	ELLCTV180M	18		30mΩ		3000	180
ELLCTV220M	ELLCTV220M	22		37mΩ		2700	220
ELLCTV270M	ELLCTV270M	27		43mΩ		2300	270
ELLCTV330M	ELLCTV330M	33		50mΩ		2200	330
ELLCTV390M	ELLCTV390M	39		61mΩ		2100	390
ELLCTV470M	ELLCTV470M	47		69mΩ		1900	470
ELLCTV560M	ELLCTV560M	56		87mΩ		1600	560
ELLCTV680M	ELLCTV680M	68		0.10		1500	680
ELLCTV820M	ELLCTV820M	82		0.12		1400	820
ELLCTV101M	ELLCTV101M	100		0.15		1200	101
ELLCTV121M	ELLCTV121M	120		0.19		1100	121
ELLCTV151M	ELLCTV151M	150		0.22		1000	151
ELLCTV181M	ELLCTV181M	180		0.27		930	181
ELLCTV221M	ELLCTV221M	220	0.31	840	221		
ELLCTV271M	ELLCTV271M	270	0.40	810	271		
ELLCTV331M	ELLCTV331M	330	0.50	660	331		
ELLCTV391M	ELLCTV391M	390	0.56	630	391		
ELLCTV471M	ELLCTV471M	470	0.69	580	471		
ELLCTV561M	ELLCTV561M	560	0.81	540	561		
ELLCTV681M	ELLCTV681M	680	1.01	470	681		
ELLCTV821M	ELLCTV821M	820	1.14	440	821		
ELLCTV102M	ELLCTV102M	1000	1.50	410	102		

***RATED CURRENT**

This DC current which causes a 30% inductance reduction from its nominal value or coil temperature rising $\Delta t=45^{\circ}\text{C}$ whichever lower. (at 20°C)

TEST CONDITION (INDUCTANCE)
100kHz, 0.3Vrms

Date 26-Jul-12

CCBG COIL DEPARTMENT

APPROVED

MICHAEL

CHECKED

CHIOU LIU

PREPARED

MENG HONG

SPECIFICATION (RELIABILITY)			(R - 0)		
Part Name			CE151-IN-xxxxxS		
CHIP CHOKE COIL			7 - 3		
ITEM	SPECIFICATION	TEST METHOD / CONDITION			
Appearance and Structure	(1) The appearance shall have no physical damage. (2) Other items shall be in accordance with the appearance and the structure in the individual specification.				
Insulation Resistance	More than 100 [MΩ]	Apply rated voltage DC100[V].			
Withstand Voltage	There shall be no abnormal.	Apply DC100V for 60 [s]. Between core and coil.			
Moisture Sensitivity	The Moisture Sensitivity Level is 1* *Floor life is limited to 1 year at 30°C/85% RH	Floor Life (Out of bag) at ≤ 30°C / 85% [RH].			
Operating temp. range	-40~105 [°C] (Including self - temperature rise)				
ENVIRONMENTAL CHARACTERISTICS	Moisture Life	(1) There shall not be case deformation or change in appearance. (2) There shall not be any shorting or disconnection.	Under applied rated current, coil shall be subjected to 90 to 95% [RH] at 60±2 °C for 500±8 [h]. Measurements shall be made after 1[h] stabilization at room temperature.		
	High Temp. Life	(1) There shall not be case deformation or change in appearance. (2) There shall not be any shorting or disconnection.	Under applied rated current, coil shall be stored at 85±2°C for 500±8 [h]. Measurements shall be made after 1[h] stabilization at room temperature.		
	Cold Resistance	Inductance shall not change more than ±10%	Coil shall be stored at -40±2°C for 500±8 [h]. Measurements shall be made after 1[h] stabilization at room temperature.		
	Heat Resistance	Inductance shall not change more than ±10%	Coil shall be stored at 85±2°C for 500±8 [h]. Measurements shall be made after 1[h] stabilization at room temperature.		
	Moisture Resistance	(1) Inductance shall not change more than ±10% (2) There shall be no abnormal in withstand voltage.	Coil shall be subjected to 90~95% RH at 60±2 [°C] for 500±8 [h]. Measurements shall be made after 1[h] stabilization at room temperature.		
	Thermal Shock	(1) There shall not be case deformation or change in appearance. (2) Inductance shall not change more than ±10%	Under 1 cycle: -40±2°C(0.5h) <==> 85±2°C (0.5h) for 200 cycles. Measurements shall be made after 1[h] stabilization at room temperature.		
	Temp. Characteristics	Inductance shall not change more than ±15%	-25 to 85°C. Standard: Values at 20°C. (at Idc=0 [A])		
PHYSICAL CHARACTERISTICS	Vibration Resistance	(1) There shall not be case deformation or change in appearance. (2) Inductance shall not change more than ±10%	After vibrating at frequencies ranging from 10 to 55 [Hz] (10 to 55 to 10/min.) with amplitude for 1.5 [mm] for 2±0.1[h] each X-Y-Z axis.		
	Terminal Strength	Terminal shall not come out.	Pulling strength of terminal: 10[N] { 1kgf } for 10 [s]		
	Solderability	Solder shall be attached more than 90% around the dipped portion.	After fluxing, coil shall be dipped in melted solder bath (M705) at 255±5°C for 3±0.5 [s].		
	Soldering Heat Resistance	(1) There shall not be case deformation or change in appearance. (2) Inductance shall not change more than ±10%	The coil shall be subjected to reflow soldering 2 times. Measurements shall be made after 1[h] stabilization at room temperature. Reflow soldering: Preheating: 150±10°C, 3 [min] . Solder dipping: 250±10°C, 10±0.5 [s]		
Date	26-Jul-12	CCBG COIL DEPARTMENT	APPROVED MICHAEL	CHECKED CHIOU LIU	PREPARED MENG HONG

SPECIFICATION (COMMON)		(R - 0)		
CHIP CHOKE COIL PRECAUTION FOR USE OF THE COIL.		CE151-IN-xxxxxS		
		7 - 4		
ITEM	CONTENTS	REMARKS		
REFLOW SOLDERING	<p>HOT BLAST REFLOW FURNACE.</p> <p>Peak Temperature: 260°C max Time above 200°C: 80 sec max</p>	<p>Testing point Products PC board</p> <p>{ Reflow soldering should be limited to 2 times. }</p>		
WASHING OF BOARD	Kindly consult the Technical department before washing of the PCB with any cleansing agent, and provide the washing condition.			
RESOLDERING WITH A SOLDERING IRON	The temperature of the tip of the soldering iron should be 360°C or less under contact time of less than 4 seconds. Note that resoldering with a soldering iron should be limited to 1 time, and afterwhich, allow the product to cool down.			
MOUNTING SIDE	External force must be less than 5.0[N] : while mounting.			
OTHERS	The customer is requested to store the products at the normal temperature (-5°C to 35°C) and under normal humidity (85%RH max.) in the packages being supplied. The package should not be exposed to direct sunlight and harmful gas, and care should be taken to avoid moisture.			
NOTE:				
<ol style="list-style-type: none"> 1. Do not allow any space between the coil and PC board. 2. Do not heap up the coil. 3. Be careful not to exert force to the terminal. 4. Refrain from using the coil which is dropped on to the floor. 				
Date	26-Jul-12	CCBG COIL DEPARTMENT	APPROVED MICHAEL	CHECKED CHIOU LIU PREPARED MENG HONG

SPECIFICATION (MATERIAL)

(R-0)

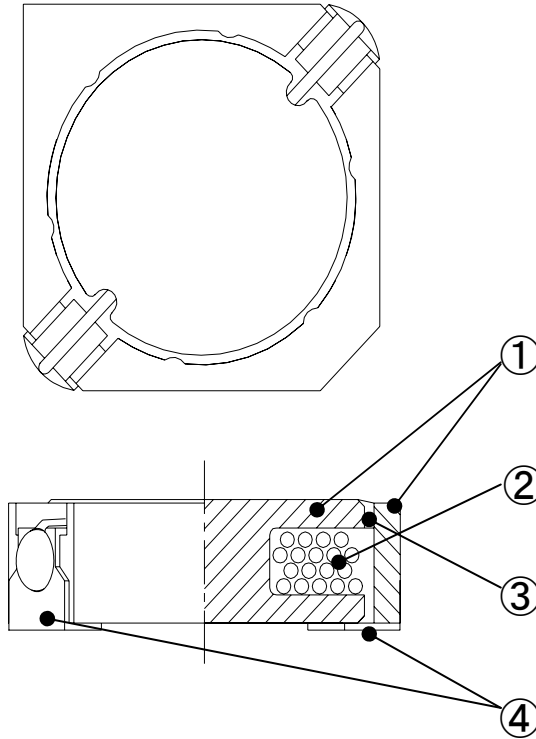
CE151-IN-xxxxxS

Part Name

CHIP CHOKE COIL (ELLC*V TYPE)

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STRUCTURE (構造図)



MATERIAL LIST

ITEM	PART NAME	MATERIALS	MANUFACTURE
1	Core	Ferrite	TDK CO.,LTD. HITACHI METALS LTD. FDK CO.,LTD. ZHEJIANG DONGYANG MAGNETIC ENTERPRISE CO. HUOH YOW ENTERPRISE CO.,LTD
2	Coil	Polyurethane Enameled Copper Wire	RIKEN ELECTRIC WIRE CO.,LTD. TOUTOKU ELECTRIC CO.,LTD. DAIICHI DENKO CO.,LTD. ELEKTRISOLA SDN. BHD. FURUKAWA ELECTRIC CO.,LTD. HITACHI DENNSEN LTD.
3	Adhesive	Epoxy Resin	OPTIONAL
4	Terminal Plating	Phosphor Bronze Sn 100%	OPTIONAL

Date 26-Jul-12

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SPECIFICATION (PACKAGING)

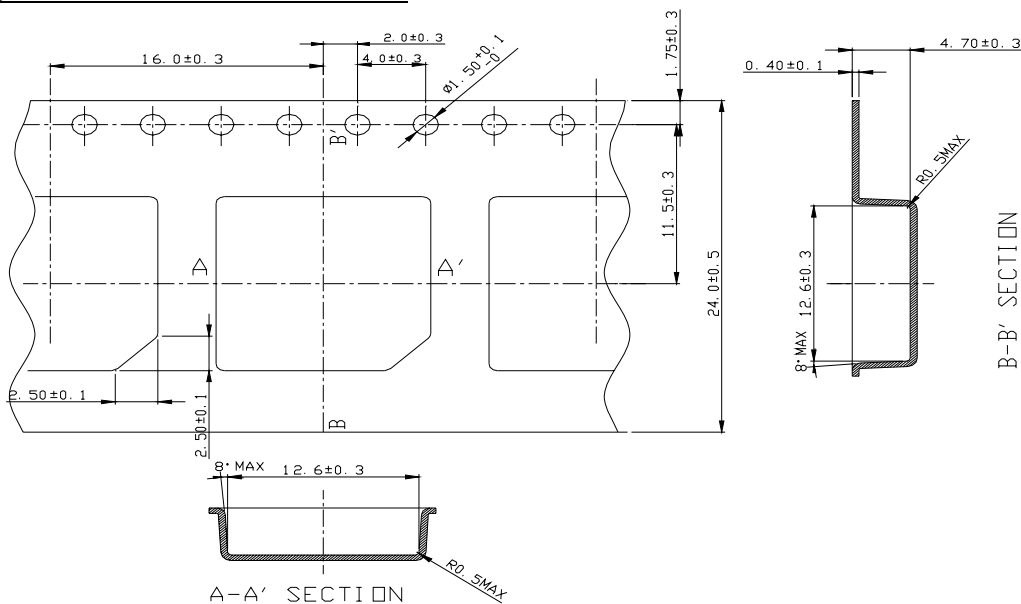
CE151-IN-xxxxxS

Part Name

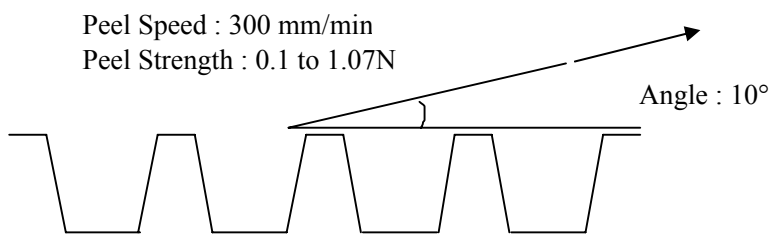
CHIP CHOKE COIL (ELLCTV TYPE)

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(1) CARRIER TAPE DIMENSIONS.



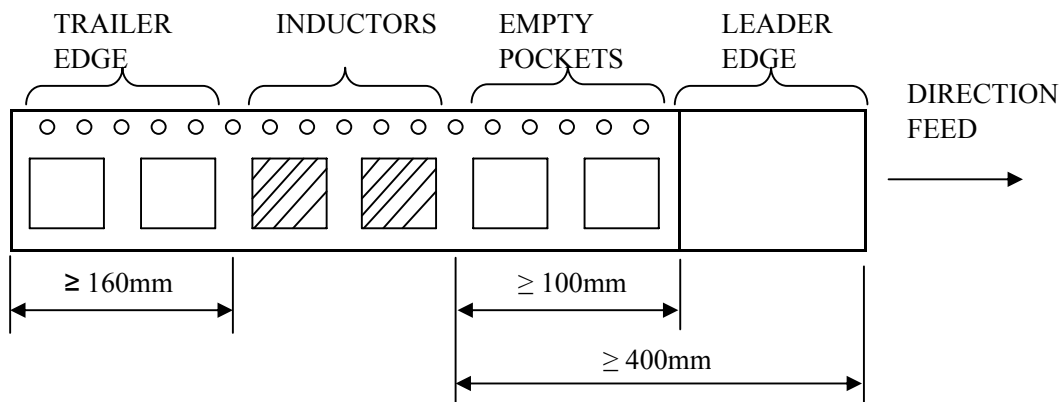
(2) COVER TAPE PEEL STRENGTH AND TEST METHOD



Breaking Strength

Both the cover tape and the carrier tape shall have a breaking strength of at least 10N.

(3) PACKAGING



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SPECIFICATION (PACKAGING)

(R-0)

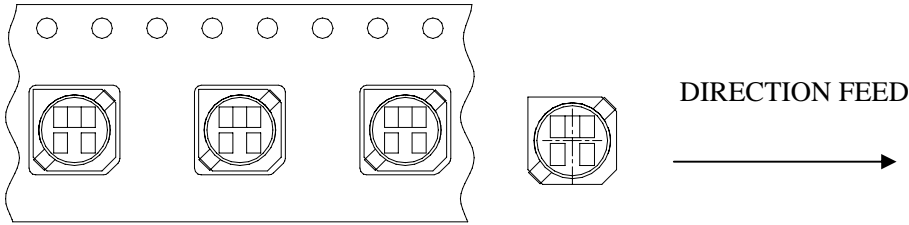
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Part Name

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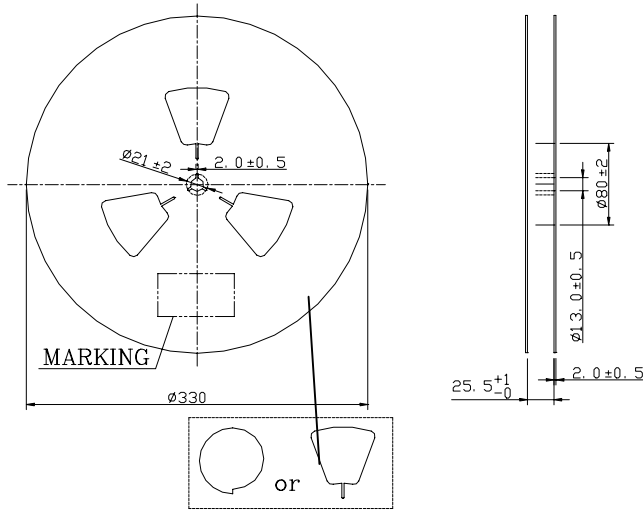
7 - 7

(4) TAPING



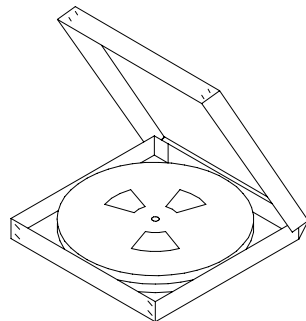
There shall not be more empty pockets than two and those pockets shall not be consecutive.

(5) REEL DIMENSIONS



- (a) QUANTITY PER REEL: 500pcs.
- (b) MARKING: CUSTOMER'S P/N, OUR P/N, QUANTITY AND Lot No.
- (c) WHITE PLASTIC REEL

(6) PACKED FORM



- (a) MARKING: CUSTOMER'S P/N, OUR P/N, QUANTITY AND Lot No.

Date 26-Jul-12	CCBG COIL DEPARTMENT	APPROVED MICHAEL	CHECKED CHIOU LIU	PREPARED MENG HONG
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