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To Digi-Key

納入仕様書

PRODUCT SPECIFICATION FOR INFORMATION

製品名称
Product Description : Chip Choke Coil

製品品番
Product Part Number : ELL3GM□□□□

松下品番
Matsushita Part Number : ELL3GM□□□□

適用(使用機種等)
Applications : General electron machinery

上記以外の適用に際しては,事前に弊社担当者までご連絡ください。
For other applications,contact our person signed below.

製造部署
Manufactured by : SINCOM(Singapore)

本仕様書の有効期間
Term of Validity : 発行日から 2007年4月22日 まで有効とします。
April 22,2007 from the date of issue

お客様ご使用欄 CUSTOMER USE ONLY

この書類を確かに受領しました。
This was certainly received by us.

松下電子部品株式会社
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コイルストラテジックビジネスユニット
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責任者 Approved	検印 Checked	担当者 Designed
<i>E. Morimoto</i>		<i>Id. Iwamoto</i>

1. この製品の使用材料は、「化学物質の審査及び製造等の規制に関する法律」に基づき、すべて既存化学物質として記載されている材料です。

All the materials used in this product are registered material under the Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances.

2. 本製品は、モントリオール議定書で規制されているオゾン層破壊物質(ODC)を製造工程及び購入部品・材料で一切使用していません。

This product has not been manufactured with any ozone depleting chemical controlled under the Montreal Protocol.

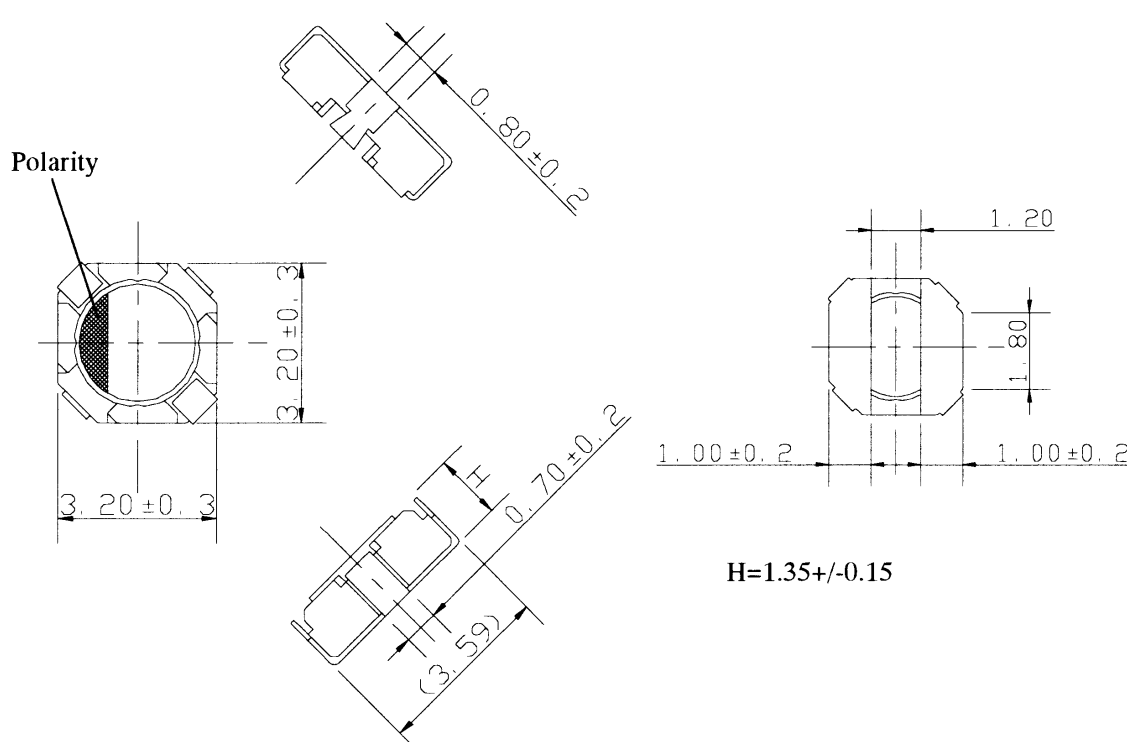
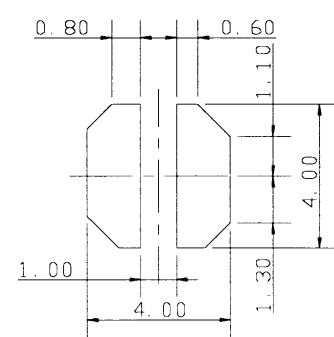
3. この製品に使用している全ての材料には、臭素系特定難燃物質「PBBOs、PBBs」を含有していません。

All the materials used in this product contain no brominated materials of PBBOs or PBBs as the flame-retardant.

4. 納入仕様書の「有効期間」について
有効期間は、特に、申し出のない限り(お客様の要望を含み)自動更新とします。
その際、連絡書・仕様書は、発行致しません。

"The Term of Validity" of Product Specifications for Information
Unless otherwise requested (including from customer), the term of validity shall be renewed automatically.

Then , informations and specifications shall be not issued.

SPECIFICATION (APPEARANCE)		(R - 0) 151-ELL3-001																					
Part Name CHIP CHOKE COIL (ELL3GM TYPE)		1 - 1																					
<u>Apperance & Dimensions (Unit:mm)</u>																							
 <p style="margin-top: 10px;"> $H=1.35\pm 0.15$ </p>																							
<u>Recommended Land Patterns (Top view)</u>																							
																							
<u>Part Number</u>																							
MATSUSHITA'S P/N		E L L 3 M M 																					
		1	2																				
		3	4																				
<table border="1" style="width: 100%; border-collapse: collapse; text-align: left;"> <tr> <td style="width: 5%; text-align: center;">1</td> <td style="width: 25%;">Height</td> <td colspan="3">G: 1.35+0.15/-0.15mm</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Inductance</td> <td>2.7uH: 2R7</td> <td>22uH: 220</td> <td>100uH: 101</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Tolerance</td> <td>M: +20/-20%</td> <td colspan="2">N: +30/-30%</td> </tr> <tr> <td style="text-align: center;">4</td> <td colspan="4">Customer division</td> </tr> </table>				1	Height	G: 1.35+0.15/-0.15mm			2	Inductance	2.7uH: 2R7	22uH: 220	100uH: 101	3	Tolerance	M: +20/-20%	N: +30/-30%		4	Customer division			
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4	Customer division																						
Date Dec. 6. 2001	TAJIMA MATSUSHITA ELECTRIC CO., LTD.	APPROVAL S.MORIMOTO	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center; border-bottom: 1px solid black;">CHECK</td> <td style="width: 50%; text-align: center; border-bottom: 1px solid black;">DESIGN</td> </tr> <tr> <td style="border: 1px solid black; height: 50px;"></td> <td style="text-align: center; vertical-align: bottom; border: 1px solid black;">H.KUWATA</td> </tr> </table>	CHECK	DESIGN		H.KUWATA																
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SPECIFICATION		(R- 0)
Part Name		151-ELL3-005
CHIP CHOKE COIL (ELL3GM TYPE)		1 - 1

Electrical Characteristics

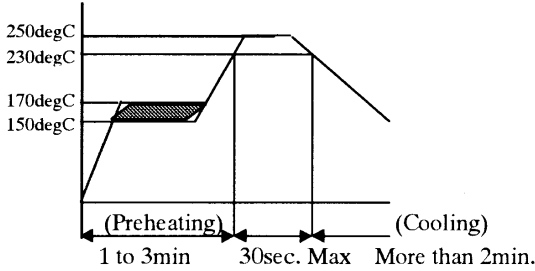
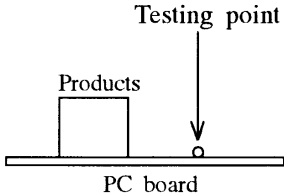
CUSTOMER'S PART NUMBER	MATSUSHITA'S PART NUMBER	INDUCTANCE		DCR(20degC)		*RATED CURRENT [mA]	Marking
		NOMINAL [uH]	TOL.	NOMINAL [ohm]	TOL.		
ELL3GM1R0N	ELL3GM1R0N	1.0	+/-30%	0.038	+/-20%	1800	A
ELL3GM1R3N	ELL3GM1R3N	1.3	+/-30%	0.058	+/-20%	1500	B
ELL3GM2R2N	ELL3GM2R2N	2.2	+/-30%	0.10	+/-20%	1100	C
ELL3GM2R7N	ELL3GM2R7N	2.7	+/-30%	0.11	+/-20%	1000	D
ELL3GM3R3N	ELL3GM3R3N	3.3	+/-30%	0.13	+/-20%	980	E
ELL3GM3R9N	ELL3GM3R9N	3.9	+/-30%	0.14	+/-20%	940	F
ELL3GM4R3N	ELL3GM4R3N	4.3	+/-30%	0.22	+/-20%	720	H
ELL3GM5R1N	ELL3GM5R1N	5.1	+/-30%	0.24	+/-20%	690	I
ELL3GM5R6N	ELL3GM5R6N	5.6	+/-30%	0.26	+/-20%	670	J
ELL3GM6R8N	ELL3GM6R8N	6.8	+/-30%	0.28	+/-20%	650	K
ELL3GM8R2N	ELL3GM8R2N	8.2	+/-30%	0.31	+/-20%	620	L
ELL3GM100M	ELL3GM100M	10	+/-20%	0.35	+/-20%	550	M
ELL3GM120M	ELL3GM120M	12	+/-20%	0.40	+/-20%	530	N
ELL3GM150M	ELL3GM150M	15	+/-20%	0.56	+/-20%	440	O
ELL3GM180M	ELL3GM180M	18	+/-20%	0.64	+/-20%	420	P
ELL3GM220M	ELL3GM220M	22	+/-20%	0.77	+/-20%	360	R
ELL3GM270M	ELL3GM270M	27	+/-20%	1.05	+/-20%	330	S
ELL3GM330M	ELL3GM330M	33	+/-20%	1.20	+/-20%	310	T

***RATED CURRENT**

This indicates the value of current when the inductance is 70% more than nominal value and temperature rising $\Delta t = 45^{\circ}\text{C}$ lower at D.C superposition.(at 20°C)

TEST CONDITION (INDUCTANCE)
100kHz, 0.3Vrms

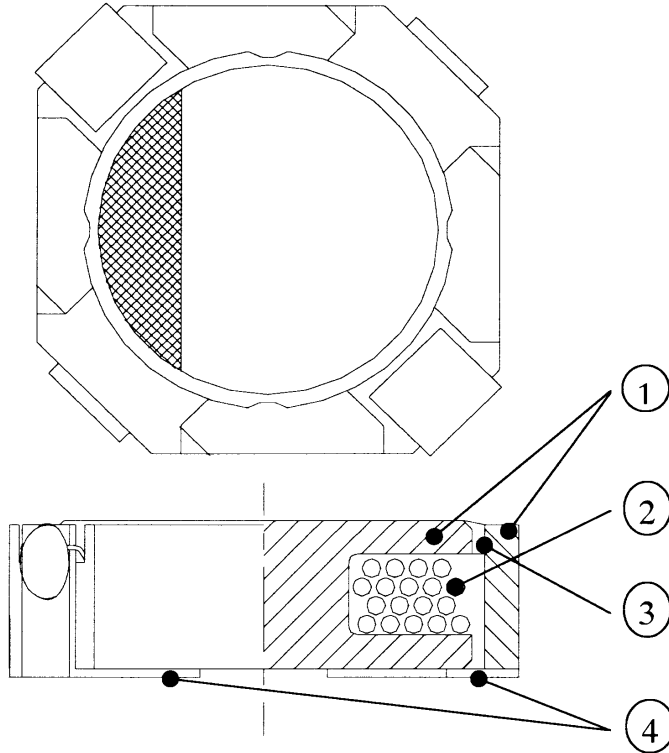
SPECIFICATION			(R - 0)
CHIP CHOKE COIL RELIABILITY CHARACTERISTICS			151-ELL3-002
			1 - 1
ITEM	SPECIFICATION	TEST METHOD / CONDITION	
Appearance And Structure	(1) The appearance shall be no damage practically harmful. (2) Other items shall be in accordance with the appearance and the structure in the individual specification.		
Insulation Resistance	More than 100 [Mohm]	After applying DC 100[V].	
Withstand Voltage	There shall be no abnormal.	After applying DC 100V for 60 [s]. Between core and coil.	
Operating temp. range	-25 to 105 [degC] (Including self - temperature rise)		
ENVIRONMENTAL CHARACTERISTICS	Moisture Life	(1)There shall not be case deformation or change in appearance. (2)There shall be no shorting or disconnection. With rated current applied, coil shall be subjected to 90 to 95% [RH] at 60 +/- 2 degC 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 be no shorting or disconnection. With rated current applied, coil shall be stored at 85+/-2 [degC] 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 [degC] 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 [degC] 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 95 to 95%RH at 60+/-2 [degC] 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% -40+/-2degC(for 0.5h) <=> 85+/-2degC(for 0.5h) 10 cycles. Measurements shall be made after 1 [h]. stabilization at room temperature.	
	Temp. Characteristics	Inductance shall not change more than +/-15% -25 to 85 [degC] Standard: Values at 20 [degC] (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: 0.98[N] 0.1kgf } for 30 [s]	
	Solderability	Solder shall be attached around the dipped portion. After fluxing, coil shall be dipped in a melted solder bath(H63A) at 230+/-5[degC] 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 3times. Measurements shall be made after 1 [h]. stabilization at room temperature. Reflow soldering: Preheating:160+/-10 [degC], 3 [min]. Solder term:240+/-10 [degC],10+/-0.5 [s]	

SPECIFICATION (COMMON)		(R - 0) 151-ELL3-003
CHIP CHOKE COIL (ELL3*M TYPE) PRECAUTION FOR USE OF THE COIL.		1 - 1
ITEM	CONTENTS	REMARKS
REFLOW SOLDERING	<p>HOT BLAST REFLOW FURNACE.</p>  <p>Peak Temperature: 250degC max Time above 200degC: 80 sec max</p>	 <p>(Reflow soldering should be limited to 3times.)</p>
WASHING OF BOARD	When the soldered PC board washed by flean or others, you are requested to contact engineering department as fo washer and washing conditions advance.	
RESOLDERING WITH A SOLDERING IRON	The temperature of the tip of the soldering iron should be 300degC or less, 3 seconds. And resoldering with a soldering iron should be limited to 1 time, and after that should be cooling these.	
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 (-5degC to 35degC) and the normal humidity (85%RH max.) in the packages we supplied. The package shall not be exposed to direct sunlight and harmful gas, and care should be taken so as not cause dew.	
1. Don't make space between the coil and PC board. 2. Don't heap up the coil. 3. Be careful not to pressing force to the terminal. 4. Don't use the coil dipped on the floor.		
DATE Dec. 6. 2001	TAJIMA MATSUSHITA ELECTRIC CO., LTD.	

MATSUSHITA ELECTRONIC COMONENT CO.,LTD.

SPECIFICATION (MATERIAL)		(R - 0)
151-ELL3-004		
Part Name	CHIP CHOKE COIL (ELL3*M TYPE)	1 - 1

Structure



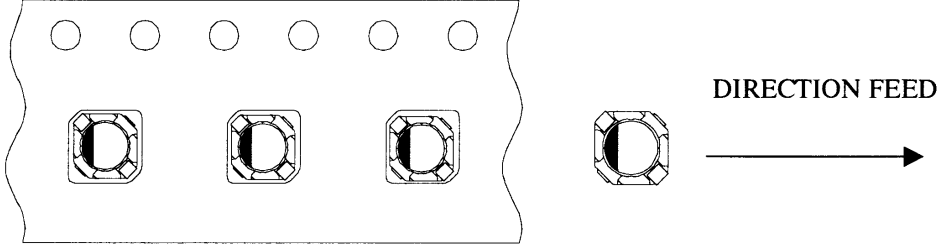
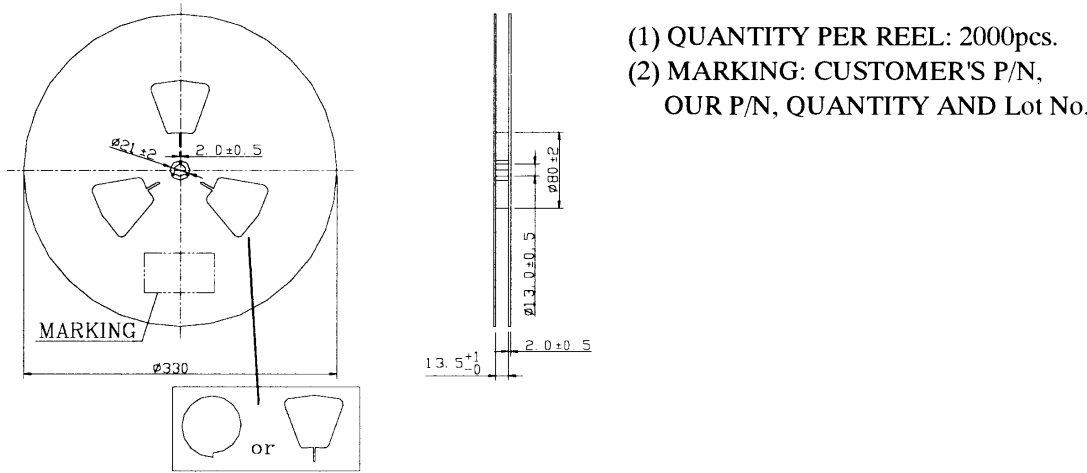
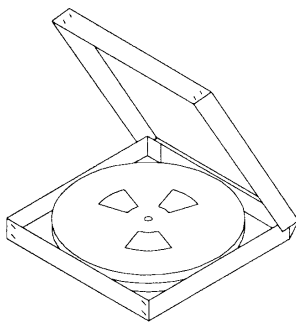
Material List

ITEM	PART NAME	MATERIALS	MANUFACTURE
1	Core	Ferrite	TDK CO.,LTD. HITACHI METALS LTD. FDK CO.,LTD. BEAD & FERRITE ELECTRONICS LTD.
2	Coil	Polyurethane Enameled Copper Wire	RIKEN ELECTRIC WIRE CO.,LTD. TOUTOKU ELECTRIC CO.,LTD. DAIICHI DENKO CO.,LTD. HITACHI DENNSEN LTD.
3	Adhesive	Epoxy Resin	OPTIONAL
4	Terminal	Phosphor Bronze	OPTIONAL

Date Dec. 6. 2001	TAJIMA MATSUSHITA ELECTRIC CO., LTD.	APPROVAL S.MORIMOTO	CHECK	DESIGN H.KUWATA
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MATSUSHITA ELECTRONIC COMONENT CO.,LTD.

<div> <div> SPECIFICATION (PACKAGING) 151-ELL3-006 (R - 0) </div> </div>		
<div> Part Name </div>	<div> CHIP CHOKE COIL (ELL3GM TYPE) </div>	<div> 2 - 1 </div>
<div> <div>Taping</div> <div>(1) CARRIER TAPE DIMENSIONS.</div> <div> </div> <div>(2) COVER TAPE PEEL STRENGTH AND TEST METHOD</div> <div> <div> PEEL SPEED : 300mm/min PEEL STRENGTH : 0.1 to 1.07N </div> <div> </div> </div> <div>(3) PACKAGING</div> <div> </div> </div>		
<div> Date Dec. 6. 2001 </div>	<div> TAJIMA MATSUSHITA ELECTRIC CO., LTD. </div>	
<div> MATSUSHITA ELECTRONIC COMONENT CO.,LTD. </div>		

SPECIFICATION (PACKAGING)		(R-0)
151-ELL3-006		
Part Name		
CHIP CHOKE COIL (ELL3GM TYPE)		2 - 2
<p><u>Taping</u></p>  <p>There shall not be more empty pockets than two and those pockets shall not be consecutive.</p> <p><u>Reel Dimensions</u></p>  <p>(1) QUANTITY PER REEL: 2000pcs. (2) MARKING: CUSTOMER'S P/N, OUR P/N, QUANTITY AND Lot No.</p> <p><u>Packed Form</u></p>  <p>(1) MARKING: CUSTOMER'S P/N, OUR P/N, QUANTITY AND Lot No.</p>		
Date Dec. 6. 2001	TAJIMA MATSUSHITA ELECTRIC CO., LTD.	

MATSUSHITA ELECTRONIC COMONENT CO.,LTD.