

ELL-8UV150M Datasheet



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DiGi Electronics Part Number ELL-8UV150M-DG

Manufacturer Panasonic Electronic Components

Manufacturer Product Number ELL-8UV150M

Description FIXED IND 15UH 2.5MA 26 OHM SMD

Detailed Description 15 μH Unshielded Drum Core, Wirewound Inductor

2.5 mA 260hm Nonstandard



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.



Purchase and inquiry

| Manufacturer Product Number: | Manufacturer: |
|---------------------------------------|---------------------------------|
| ELL-8UV150M | Panasonic Electronic Components |
| Series: | Product Status: |
| ELL-8UV | Obsolete |
| Type: | Material - Core: |
| Drum Core, Wirewound | Ferrite |
| Inductance: | Tolerance: |
| 15 µН | ±20% |
| Current Rating (Amps): | Current - Saturation (Isat): |
| 2.5 mA | |
| Shielding: | DC Resistance (DCR): |
| Unshielded | 260hm |
| Q @ Freq: | Frequency - Self Resonant: |
| | |
| Ratings: | Operating Temperature: |
| | -40°C ~ 105°C |
| Inductance Frequency - Test: | Mounting Type: |
| 100 kHz | Surface Mount |
| Package / Case: | Supplier Device Package: |
| Nonstandard | |
| Size / Dimension: | Height - Seated (Max): |
| 0.315" L x 0.315" W (8.00mm x 8.00mm) | 0.256" (6.50mm) |
| Base Product Number: | |
| ELL-8UV | |

Environmental & Export classification

| Moisture Sensitivity Level (MSL): | ECCN: |
|-----------------------------------|-------|
| 1 (Unlimited) | EAR99 |
| HTSUS: | |
| 8504.50.8000 | |

| | DIGI KEY | άn ↔ | Issued Date | 23/08/2005 T11S-05017 |
|------------------------|------------------------|---------------------------------------|-----------------------------------|----------------------------|
| | | 御中 | No. | |
| D. I.N. | REVISION INFORMATION | ON LETTER FOR PRODUCT SPECIFICATION I | | 青叹訂 建裕青 |
| Part Name 製品名 | | CHIP CHOKE CO | DIL | |
| Part No. | ELL8UV[][][] | Our Part | : No. 当方品番 | |
| 品 番 | | [E | | |
| Used Model or | · | e e | | |
| Spec.No 使用機種 | T1S-05013A | · é | | |
| 又は仕様書番号 Reasons for | | | | |
| Change | Include additional | inductance value 6.2uH, 33uH and | 220uH. | i |
| 変更理由 | | | | |
| | | | | |
| | | | | |
| Details 変 更 内 容 | In | clude additional inductance val | ue 6 2uH 33uH and 2 | 20uH |
| 及文的母 | | art No: ELL8UV6R2N, ELL8UV33 | | |
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| | | | <u> </u> | |
| Effective Date & | Our request date and | method | | |
| Method of Change | of the change are as f | | į. | |
| 実施時期 | AUGUS | | | |
| および方法 | | ー 間にて別途調整 | | |
| | Spec | 9 sheets | _ | |
| | 規格書 | 枚 (スペック・マテリアルリスト) | | |
| Attached Sheets | •Drawing | sheets | | |
| 添 付 資 料 | 図面 | 枚 (外観図・構造図・付属書) | 0 - 1 | |
| Yes No | ・Test Data 試験データー | sheets 枚 () | ◎ Reply 回答欄 •Number of samples | for proproduction |
| 有無 | etc. | sheets | confirmation. | pcs. |
| C 11 /m J | その他 | 枚 (表紙·生産工場·etc.) | プリプロ用確認サンプリ | |
| | •Number of submiss | | •Sample addressee | |
| | 提出部数 | 部 (5)は表紙なし。 | サンプル送付先 | |
| | ・Sample サンプル | 個 | ・Sample sending dat サンプル送付日 | te まで |
| | "" – | | Please reply by | |
| | | | 110000 10019 09 | まで、ご回答ください |
| | | | ますようお願い致し | |
| | | | | |
| Isuued Section | | | MEDIAGECH | (18Dog Fried) (18Dog Deen) |
| 登行 部 署 | Acousti | ic & Inductive Products Division | 23 AHG 2005 | 23. AUG.2005 23. AUG.2005 |

Panasonic Electronic Devices Singapore Pte. Ltd.

TE-S-MP-03 (R0)

Sincom

ISSUED ON

23 AUG 2005

PEDSG INDUCTIVE TECH.

Approval Specifications

CUSTOMER

Digi Key

PART NAME

CHIP CHOKE COIL

CUSTOMER PART No.

ELL8UV[][][][]

PANASONIC PART No. :

ELL8UV[][][][]

MODEL NAME / No.

MANUFACTURED IN

INDONESIA

CUSTOMER'S ACKNOWLEDGEMENT

PLEASE RETURN ONE COPY

PANASONIC ELECTRONIC DEVICES SINGAPORE PTE. LTD.

No. 3 BEDOK SOUTH ROAD, SINGAPORE 469269

FAX: 62418954

TEL: 62495171

SPEC SERIAL NO.:

T1S - 05013A

| Approved | Checked | Prepared |
|--|-----------------------------------|--------------------------------------|
| IND TECH 23. AUG. 2005 H. KUWATA | IND TECH 23. AUG.2005 MICHAEL LIM | 1ND TECH 23.AUG.2005 C. H. SIM |

 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.

 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、 PBBe」を含有しておりません。

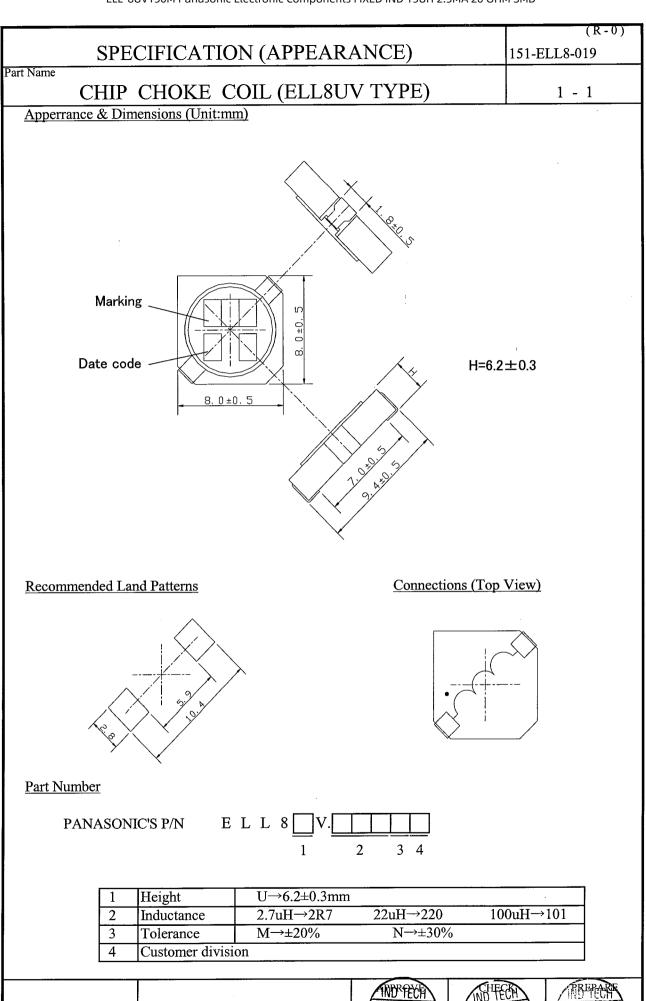
All the materials used in this product contain no brominated materials of PBBOs or PBBs as the flame-retardant.

・ 納入仕様審の「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.

5. Refer to "113-TEC-001" for ERS issues



Date Aug. 22 '05

INDUCTIVE DEPARTMENT







| | | (R- 1) |
|-----------|-------------------------------|--------------|
| | SPECIFICATION | 151-ELL8-020 |
| Part Name | | |
| | CHIP CHOKE COIL (ELL8UV TYPE) | 1 - 1 |

Electrical Characteristics

| | CUSTOMER'S | PANASONIC'S | INDUC | TANCE | DCR(| 20°C) | *RATED | MARKING |
|-------------|-------------|-------------|---------|-------|---------|--------|---------|---------|
| | PART NUMBER | PART NUMBER | NOMINAL | TOL. | NOMINAL | TOL. | CURRENT | |
| | | | [uH] | | [Ω] | | [mA] | |
| | ELL8UV1R3N | ELL8UV1R3N | 1.3 | 1 | 7.8 | | 5.40 | 1R3: |
| | ELL8UV2R0N | ELL8UV2R0N | 2.0 | ±30% | 8.7 | | 5.10 | 2R0 |
| | ELL8UV2R7N | ELL8UV2R7N | 2.7 | | 10 | | 4.75 | 2R7 |
| | ELL8UV4R7N | ELL8UV4R7N | 4.7 | | 12 | | 4.20 | 4R7 |
| \triangle | ELL8UV6R2N | ELL8UV6R2N | 6.2 | | 16 | | 3.80 | 6R2 |
| | ELL8UV100M | ELL8UV100M | 10 | | 22 | | 3.00 | 100 |
| | ELL8UV150M | ELL8UV150M | 15 | | 26 | _ ±20% | 2.50 | 150 |
| | ELL8UV220M | ELL8UV220M | 22 | | 40 | | 2.05 | 220 |
| | ELL8UV270M | ELL8UV270M | 27 | ±20% | 53 | | 1.80 | 270 |
| \triangle | ELL8UV330M | ELL8UV330M | 33 | | 78 | | 1.65 | 330 |
| | ELL8UV390M | ELL8UV390M | 39 | | 90 | · | 1.50 | 390 |
| | ELL8UV470M | ELL8UV470M | 47 | | 100 | | 1.25 | 470 |
| | ELL8UV680M | ELL8UV680M | 68 | | 130 | | 1.10 | 680 |
| | ELL8UV101M | ELL8UV101M | 100 | | 160 | , | 0.82 | 101 |
| △ | ELL8UV221M | ELL8UV221M | 220 | | 370 | | 0.66 | 221 |

*RATED CURRENT

This indicates the value of curret when the inductance is 70% more than nominal value and temperature rising Δ t=45°C lower at D.C superposition.(at 20°C)

TEST CONDITION (INDUCTANCE) 100kHz, 0.3Vrms

SPECIFICATION

151-ELL8-021

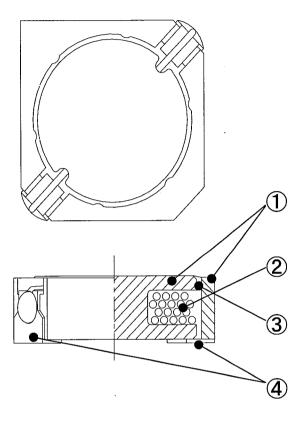
CHIP CHOKE COIL RELIABILITY CHARACTERISTICS

| | CHIP CHO. | KE COIL RELIABILITY CHARACTERISTICS | 1 - 1 |
|-----------------|------------------------------|--|---|
| | ITEM | TEST METHOD / CONDITION | |
| | Appearance And Structure | (1) The appearance shall be no damage practically harmful.(2) Other items shell be in accordance with the appearance and the structure in the individual specification. | |
| Insu | lation Resistance | More than 100 [M Ω]. | After applying DC 100[V]. |
| Wi | ithstand Voltage | There shall be no abnormal. | After applying DC 100V for 60 [s]. Between core and coil. |
| Op | perating temp. | -40~105 [°C] (Including self - temperature rise) | |
| | 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 90~95% [RH] at 60±2°C for 500±8 [h]. Measurements shall be made after 1 [h] stabilization at room temperature. |
| ISTICS | 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 [°C] for 500±8 [h]. Measurements shall be made after 1[h] stabilization at room temperature. |
| CHARACTERISTICS | 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. |
| ENVIRONMENTAL | Moisture Resistance | (1)Inductance shall not change more than ±10%(2)There shall be no abnormal in withstand voltage. | Coil shall be subjected to 95~95%RH at 60±2 [°C] for 500±8 [h]. Measurements shall be made after 1 [h] stabilization at room temperature. |
| EN | Thermal Shock | (1)There shall not be case deformation or change in appearance. (2)Inductance shall not change more than $\pm 10\%$ | -40±2°C (for 0.5h) ⇔ 85±2°C (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% | -25~85 [°C] Standard: Values at 20 [°C] (at Idc=0 [A]) |
| SS | Vibration Resistance | (1)There shall not be case deformation or change in appearance. (2)Inductance shall not change more than \pm 10% | After vibrating at frequencies ranging from 10 to 55 [Hz] (10~55~10/min.) with amplitude for 1.5 [mm] for 2±0.1 [h] each X-Y-Z axis. |
| RISTIC | Terminal Strength | Terminal shall not come out. | Pulling strength of terminal: 0.98 [N] { 0.1kgf for 30 [s] |
| CHARACTERISTICS | Solderability | Solder shall be attached more than 90% around the dipped portion. | After fluxing, coil shall be dipped in a melted solder bath(M705) at 255±5[°C] for 3±0.5 [s] |
| PHYSICAL CH | 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 2times. Measurements shall be made after 1 [h] stabilization at room temperature. Reflow soldering: |
| 품 | | | Preheating:150±10 [°C], 3 [min]. Solder dipping:250±10 [°C],10±0.5 [s] |

| | SPECI | FICATION (COMMON) | (R-1) 151-ELL8-022 |
|--|---|---|---|
| СНІР СНОКЕ | 1 – 1 | | |
| | | | |
| ITEM | | CONTENTS | REMARKS |
| REFLOW SOLDERING | HOT BLAST R 260degC 230degC 170degC 150degC | (Preheating) (Cooling) 1 to 3min. 30sec. Max More than 2min. | Products PC board |
| | | perature : 260degC max. ve 200degC : 80sec. Max. | Reflow soldering should be limited to 2times. |
| WASHING OF BOARD | are requested to co | d PC board washed by fleon or others, you ontact engineering department as for ng conditions advance. | |
| | The temperature of 300°C or less, 3 And resoldering w 1 time, and after the | f the tip of the soldering iron should be | |
| MOUNTING SIDE | | | |
| OTHERS | normal temperatur (85%RH max.) in not be exposed to | equested to store the products at the re (-5°C to 35°C) and the normal humidity the packages we supplied. The package shall direct sunlight and harmful gas, and care as not cause dew. | |
| Don't heap Be careful | | rce to the terminal. | |
| DATE Aug. 2 | 22 '05 | INDUCTIVE DEPARTMENT | |

| | (R-0) |
|---|--------------|
| SPECIFICATION (MATERIAL) | 151-ELL8-013 |
| Part Name CHIP CHOKE COIL (ELL8*V TYPE) | 1 - 1 |

Structure



Material List

| ITEM | PART NAME | MATERIALS | MANUFACTURE |
|------|-----------|--------------------------------------|--|
| 1 | Core | Ferrite | TDK CO.,LTD. HITACHI METALS LTD. FDK CO.,LTD. ZHEJIANG TIANTONG ELECT. CO.,LTD HUOH YOW ENTERPRISE CO.,LTD |
| 2 | Coil | Polyurethane Enameled Copper Wire | RIKEN ELECTRIC WIRE CO.,LTD. TOUTOKU ELECTRIC CO.,LTD. DAIICHI DENKO CO.,LTD. HITACHI DENNSENN LTD. |
| 3 | Adhesive | Epoxy Resin | OPTIONAL |
| 4 | Terminal | Phosphor Bronze | OPTIONAL |

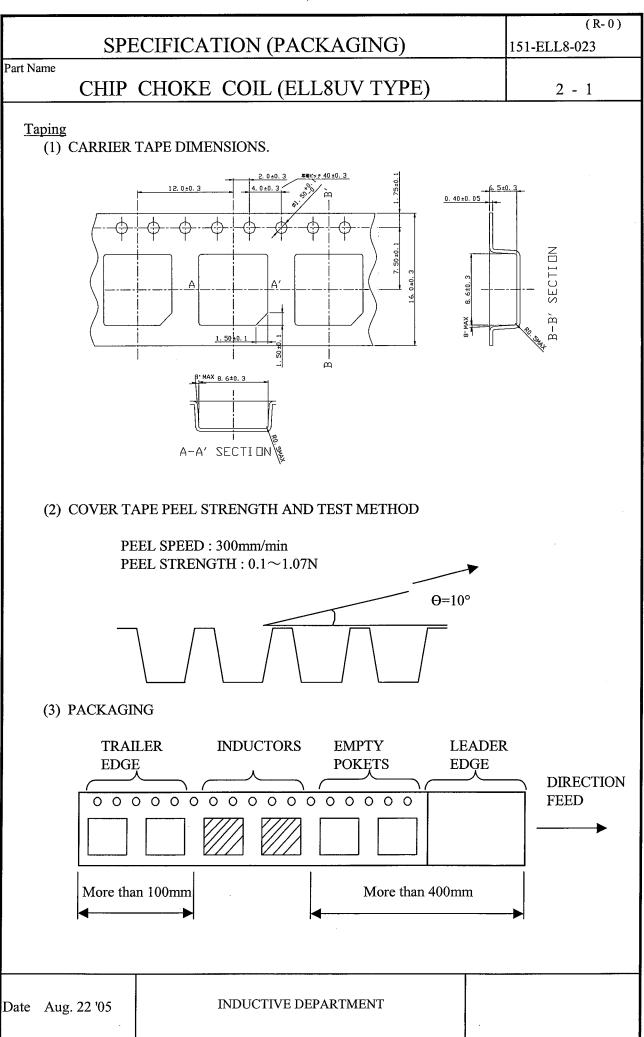
Date Aug. 22 '05

INDUCTIVE DEPARTMENT



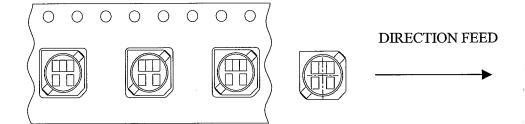






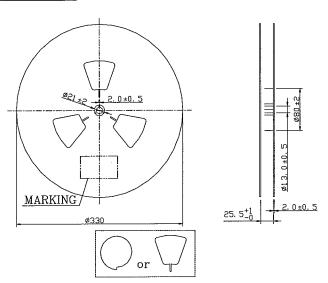
| | | (R-0) |
|-----------|-------------------------------|--------------|
| | SPECIFICATION (PACKAGING) | 151-ELL8-023 |
| Part Name | | |
| | CHIP CHOKE COIL (ELL8UV TYPE) | 2 - 2 |

Taping



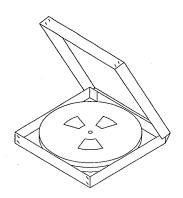
There shall not be more empty pockets than two and those pockets shall not be consecutive.

Reel Dimensions



- (1) QUANTITY PER REEL: 500pcs.
- (2) MARKING: CUSTOMER'S P/N, OUR P/N, QUANTITY AND Lot No.

Packed Form



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

2reel/box

Date Aug. 22 '05

INDUCTIVE DEPARTMENT



OUR CERTIFICATE

DiGi provide top-quality products and perfect service for customer worldwide through standardization, technological innovation and continuous improvement. DiGi through third-party certification, we striciy control the quality of products and services. Welcome your RFQ to Email: Info@DiGi-Electronics.com

















Tel: +00 852-30501935

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