

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [5019512410](#)  
**Status:** **Active**  
**Description:** 0.50mm (.020") Pitch Easy-On™ FFC/FPC Connector, Vertical, SMT, Gold Plating, 24 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-501951-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family FFC/FPC Connectors  
 Series [501951](#)  
 Product Name Easy-On™

**Physical**

Circuits (Loaded) 24  
 Circuits (maximum) 24  
 Color - Resin Brown, Natural  
 Contact Position N/A  
 Durability (mating cycles max) 20  
 Entry Angle Vertical  
 Mated Height (in) 0.159 In  
 Mated Height (mm) 4.05 mm  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Gold  
 Number of Rows 1  
 Orientation Vertical  
 PCB Locator No  
 PCB Retention Yes  
 Packaging Type Embossed Tape on Reel  
 Pitch - Mating Interface (in) 0.020 In  
 Pitch - Mating Interface (mm) 0.50 mm  
 Pitch - Term. Interface (in) 0.020 In  
 Pitch - Term. Interface (mm) 0.50 mm  
 Polarized to PCB No  
 Stackable No  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -25°C to +85°C  
 Termination Interface: Style Surface Mount  
 Wire/Cable Type FFC/FPC

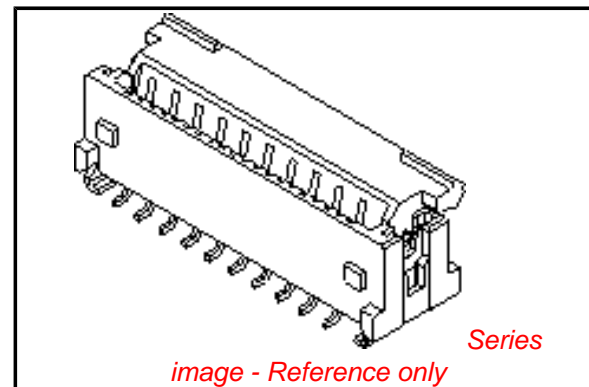
**Electrical**

Current - Maximum per Contact 0.4A  
 Voltage - Maximum 50V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-501951-002, RPS-501951-001, RPS-501951-003, RPS-501951-004, RPS-501951-005, RPS-501951-006, RPS-501951-007, RPS-501951-009, RPS-501951-015  
 Sales Drawing SD-501951-003, SD-501951-004



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free Status**  
 Not Reviewed

**China RoHS**



**Need more information on product environmental compliance?**

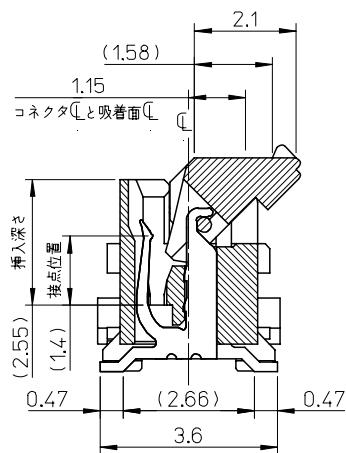
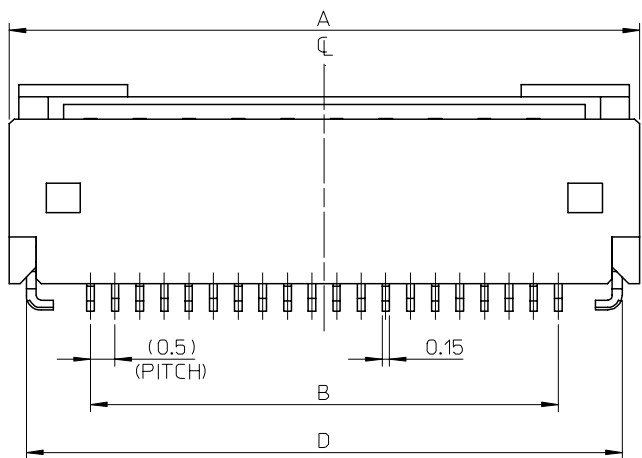
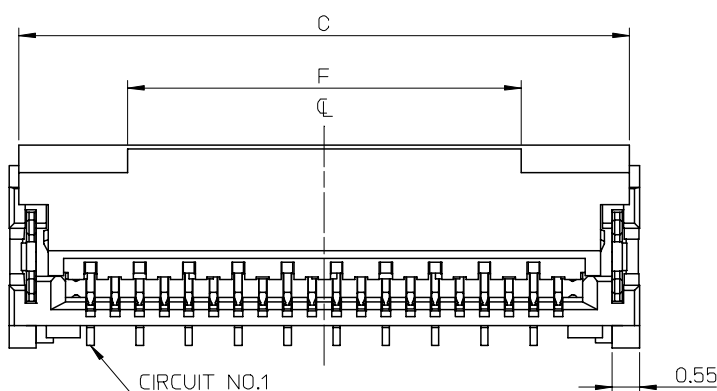
Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

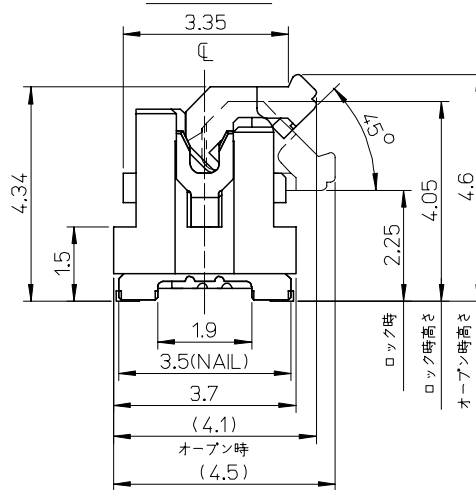
**Search Parts in this Series**  
[501951Series](#)

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10 9 8 7 6 5 4 3 2 1



断面図 (参考)



注記 NOTES

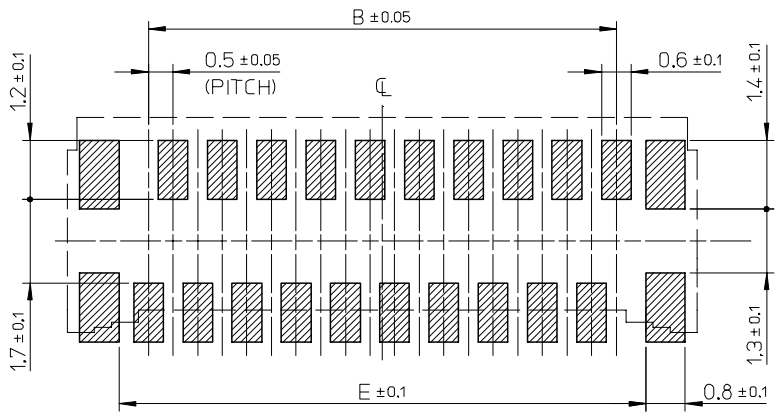
- 使用材料 MATERIAL  
 ハウジング : 液晶ポリマー ガラス充填, UL94V-0(白)  
 HOUSING : LIQUID CRYSTAL POLYMER  
 GLASS FILLED, UL94V-0 (WHITE)  
 アクチュエータ : ポリアミド 9T, ガラス充填, UL94V-0(茶)  
 ACTUATOR : POLYAMIDE 9T, GLASS FILLED,  
 UL94V-0 (BROWN)  
 ターミナル : 銅合金(1=0.15)  
 TERMINAL : COPPER ALLOY  
 金具 : 銅合金(1=0.2)  
 FITTING NAIL : COPPER ALLOY
  - めっき仕様 PLATING  
 ターミナル TERMINAL  
 ニッケル下処理めっき  
 GOLD(AU) OVER NICKEL(NI) PLATING.  
 金具 FITTING NAIL  
 ニッケル下処理めっき  
 TIN(Sn) OVER NICKEL(NI) PLATING.
  - テールと金具を併せた平坦度は 0.1ミリメートル以下(リフロー前)  
 TAILS AND NAILS COPLANARITY  
 TO BE 0.1 MAX. (BEFORE REFLOW)
  - ELV及びRoHS適合品  
 ELV AND RoHS COMPLIANT
- △ R0.3は、FPC導体部にかからないこと。  
 R0.3 MUST NOT BE OVERLAPPED  
 TO PATTERN OF FPC.

8	35.7	37.1	37.4	34.5	37.8	501951-7019	70
	30.7	32.1	32.4	29.5	32.8	501951-6019	60
	25.7	27.1	27.4	24.5	27.8	501951-5019	50
	23.2	24.6	24.9	22	25.3	501951-4519	45
	20.7	22.1	22.4	19.5	22.8	501951-4019	40
	16.7	18.1	18.4	15.5	18.8	501951-3219	32
	15.7	17.1	17.4	14.5	17.8	501951-3019	30
	12.7	14.1	14.4	11.5	14.8	501951-2419	24
	11.7	13.1	13.4	10.5	13.8	501951-2219	22
	10.7	12.1	12.4	9.5	12.8	501951-2019	20
F	E	D	C	B	A	MATERIAL NO.	CIRCUITS

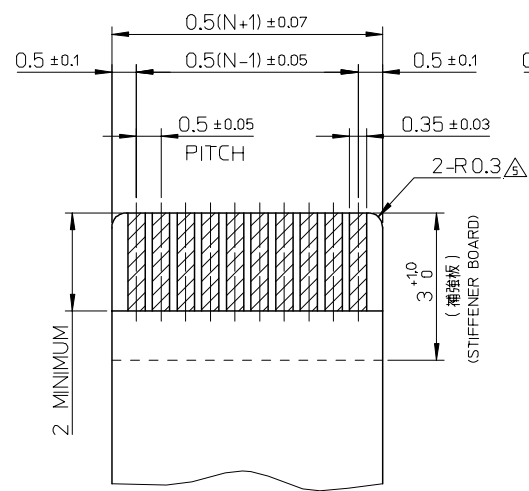
REVISED EC NO: J2008-1229 DRW:HYAJIMA 2007/10/11 CHKD:THARUYAMA 2007/10/11 APPR:NUKITA 2007/10/12	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	±0.2	DRAWN BY TRSUZUKI	DATE 2006/08/21	TITLE 0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD)		
	10 OVER 30 UNDER	±0.25	CHECKED BY HHIRATA	DATE 2006/08/21	MOLEX INCORPORATED		
	30 OVER	±0.3	APPROVED BY MSASAO	DATE 2006/08/21	DOCUMENT NO. SD-501951-003		
	ANGULAR	±1 °	MATERIAL NO.		SHEET NO. 1 OF 2		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART					
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							

10 9 8 7 6 5 4 3 2 1

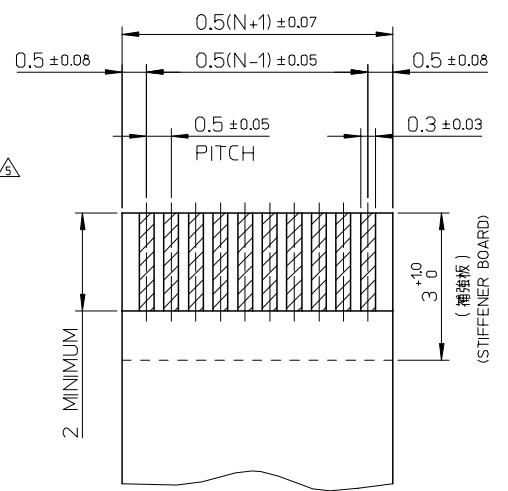
F  
E  
D  
C  
B  
A



参考基板レイアウト(マウント面)  
P.C. BOARD PATTERN DIMENSION (REF.)  
(MOUNT AREA)



適合FPC推奨寸法  
APPLICABLE FPC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.3 ± 0.03)  
(THICKNESS: 0.3 ± 0.03)  
N: 極数  
N: CIRCUITS



適合FFC推奨寸法  
APPLICABLE FFC  
RECOMMENDED DIMENSION  
(仕上がり厚さ: 0.3 ± 0.03)  
(THICKNESS: 0.3 ± 0.03)  
N: 極数  
N: CIRCUITS

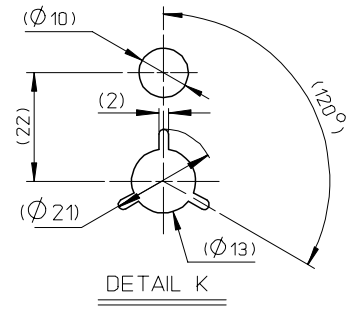
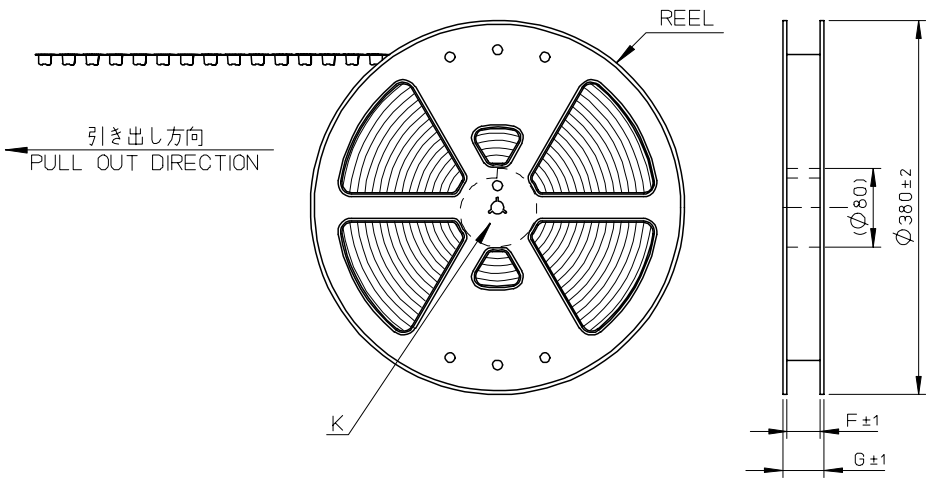
FPC について:

打ち抜き方向は導体側から補強板側を推奨します。  
導体部については軟銅箔35 $\mu$ mまたは50 $\mu$ mを推奨します。  
補強フィルム材質はポリイミドを推奨します。ベースフィルムは25 $\mu$ mを推奨します。  
接着剤は熱硬化接着剤を推奨します。  
尚、接着剤の接点部への付着は導通不良の原因になりますので、染み出しが無い様お願い致します。

ABOUT FPC

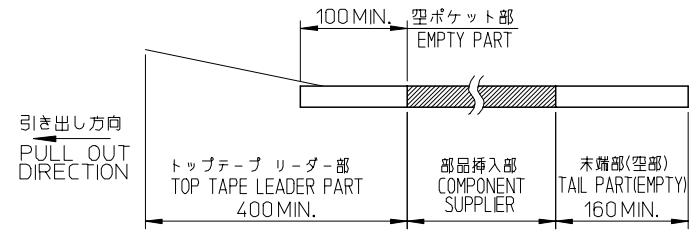
RECOMMENDED PUNCHER DIRECTION : FROM CONDUCTOR SIDE TO STIFFENER FILM SIDE.  
RECOMMENDED CONDUCTOR SPEC :  
THICKNESS OF SOFT COPPER FOIL : 35 MICROMETER OR 50 MICROMETER.  
RECOMMENDED MATERIAL/THICKNESS.  
STIFFENER FILM : POLYIMIDE  
BASE FILM THICKNESS : 25 $\mu$ m  
BONDING AGENT : THERMOSETTING BONDING AGENT  
PLEASE PUT APPROPRIATE AMOUNT OF ADHESIVE ON ADHEREND BECAUSE THERE IS A POSSIBILITY THAT THE EXTRA ADHESIVE CAUSES THE DEFECT IN ELECTRICAL CONTINUITY.

SEE SHEET 1 EC NO: J2008-1229 DRW:HYAJIMA 2007/10/11 CHKD:THARUYAMA 2007/10/11 APPR:NUKITA 2007/10/12	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
	10 UNDER	± 0.2	DRAWN BY TRSUZUKI	DATE 2006/08/21	TITLE 0.5 FPC CONN. HSG ASSY EASY ON / STRAIGHT (GOLD)			
	10 OVER 30 UNDER	± 0.25	CHECKED BY HHIRATA	DATE 2006/08/21				
	30 OVER	± 0.3	APPROVED BY MSASAO	DATE 2006/08/21	MOLEX INCORPORATED			
	ANGULAR	± 1 °	MATERIAL NO.					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-501951-003		2 OF 2		
SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								



NOTES

- 製品詳細寸法については図面 SD-501951-003を参照下さい。  
FOR DIMENSIONS OF PRODUCT, REFER TO RSD-501951-007.
- 梱包数量 : 2000個/リール  
NUMBER OF CONNECTORS : 2000PIECES/REEL
- リードテープ長さ  
LEAD TAPE LENGTH



4. 材料 MATERIAL

キャリアテープ : ポリプロピレン  
CARRIER TAPE : POLYPROPYLENE  
トップテープ : ポリエチレンテレフタレート, ポリエチレン  
TOP TAPE : POLYETHYLENE TEREPHTHALATE , POLYETHYLENE  
リール : ポリスチレン<リサイクル材を含む>  
REEL : POLYSTYRENE<RECYCLE MATERIAL CONTAINED>

5. ELV及びRoHS適合品 ELV AND RoHS COMPLIANT

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	10 UNDER	±0.2	DRAWN BY TRSUZUKI	DATE 2006/09/05	TITLE 0.5 FPC CONN. HSG ASSY E/O STRAIGHT EMBSTP PKG (GOLD)			
	10 OVER 30 UNDER	±0.25	CHECKED BY HIRATA	DATE 2006/09/05	APPROVED BY MSASAO			
	30 OVER	±0.3	APPROVED BY MSASAO		DATE 2006/09/05	MOLEX INCORPORATED		
	ANGULAR	±1 °	MATERIAL NO. SEE SHEET 2		DOCUMENT NO. SD-501951-004		SHEET NO. 1 OF 2	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

10 9 8 7 6 5 4 3 2 1

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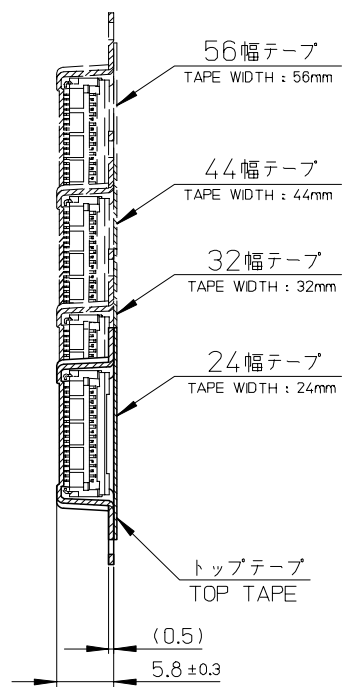
D

C

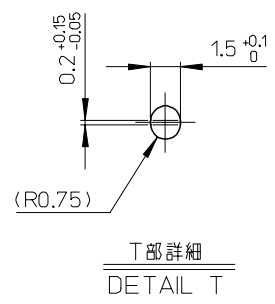
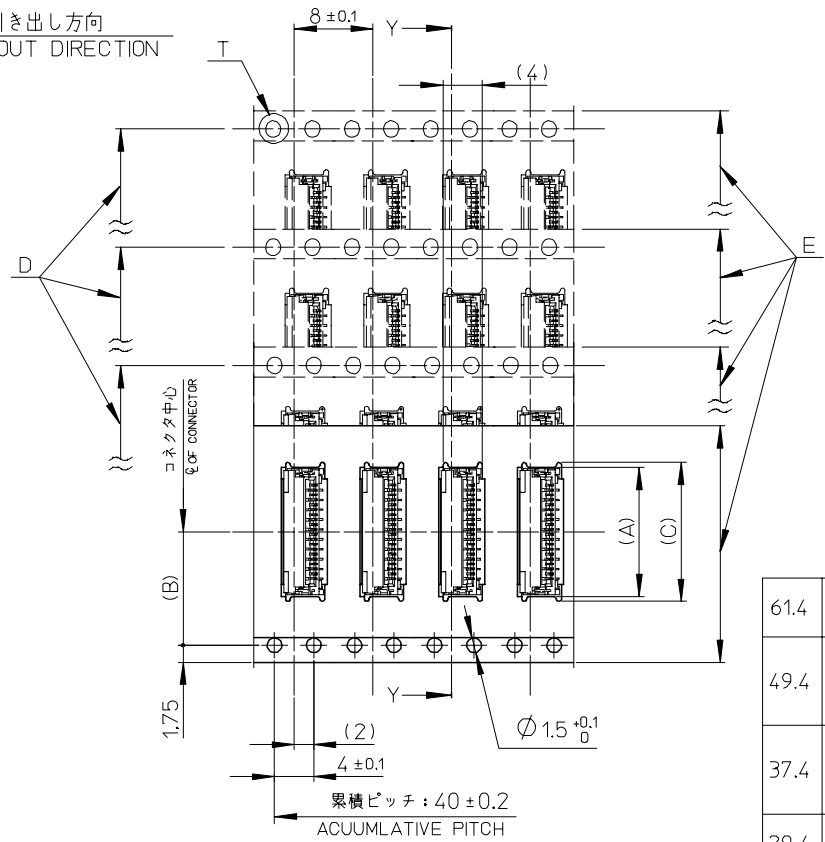
B

A

引き出し方向  
PULL OUT DIRECTION



断面 Y-Y  
SECTION Y-Y



61.4	57.4	56 ± 0.3	52.4	39.1	26.2	38.1	501951-7010	70
				34.1		33.1	501951-6010	60
49.4	45.4	44 ± 0.3	40.4	29.1	20.2	28.1	501951-5010	50
				24.1		25.6	501951-4510	45
				20.1		23.1	501951-4010	40
37.4	33.4	32 ± 0.3	28.4	19.1	14.2	19.1	501951-3210	32
				16.1		18.1	501951-3010	30
				15.1		15.1	501951-2410	24
29.4	25.4	24 ± 0.3		14.1	11.5	14.1	501951-2210	22
				14.1		13.1	501951-2010	20
G	F	E キャリアテープ幅 CARRIER TAPE WIDTH	D	(C)	(B)	(A)	製品番号 MATERIAL NO.	極数 CIRCUITS

SEE SHEET 1 EC NO: J2008-1229 DRW: HVAJIMA 2007/10/11 CHKD: THARUYAMA 2007/10/11 APPR: NUKITA 2007/10/12	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
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	30 OVER	± 0.3	APPROVED BY MSASAO	DATE 2006/09/05	DOCUMENT NO. SD-501951-004			
	ANGULAR	± 1 °	MATERIAL NO.		SHEET NO. 2 OF 2			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART						
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Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.