

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

**Part Number:** [5016451020](#)  
**Status:** **Active**  
**Overview:** [igrid](#)  
**Description:** 2.00mm (.079") Pitch iGrid™ Wire-to-Board Header, Dual Row, Vertical, with PCB Locator, 10 Circuits, Lead-free

**Documents:**

[3D Model](#) [Product Specification PS-501646-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">501645</a>
Application	Wire-to-Board
MolexKits	Yes
Overview	<a href="#">igrid</a>
Product Name	iGrid™

**Physical**

Breakaway	No
Circuits (Loaded)	10
Color - Resin	Natural
Durability (mating cycles max)	30
Glow-Wire Compliant	No
Keying to Mating Part	Yes
Lock to Mating Part	Yes
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	Nylon
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.126 In
PC Tail Length (mm)	3.20 mm
PCB Locator	Yes
PCB Retention	None
PCB Thickness Recommended (in)	0.047 In, 0.063 In
PCB Thickness Recommended (mm)	1.20 mm, 1.60 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.079 In
Pitch - Mating Interface (mm)	2.00 mm
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	-25°C to +85°C
Termination Interface: Style	Through Hole

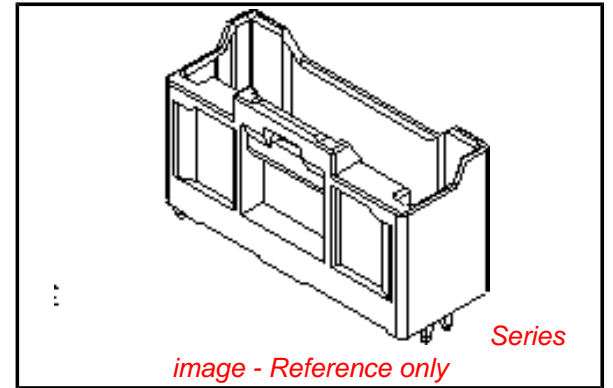
**Electrical**

Current - Maximum per Contact	2A
Voltage - Maximum	250V AC (RMS)/DC

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification	SPK-501645-001
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*image - Reference only*

**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**

[501645Series](#)

**Mates With**

[501646](#) Housing. [501647](#) Crimp Terminal 22-26 AWG. [501648](#) Crimp Terminal 26-28 AWG

Product Specification

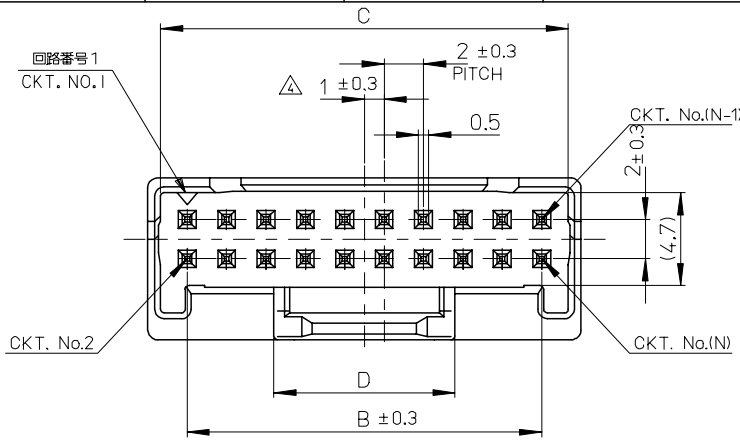
Sales Drawing

PS-501646-001, RPS-501646-001, RPS-501646-002,  
RPS-501646-003, RPS-501646-004, RPS-501646-005,  
RPS-501646-006, RPS-501646-007  
SD-501645-001

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注記 NOTES

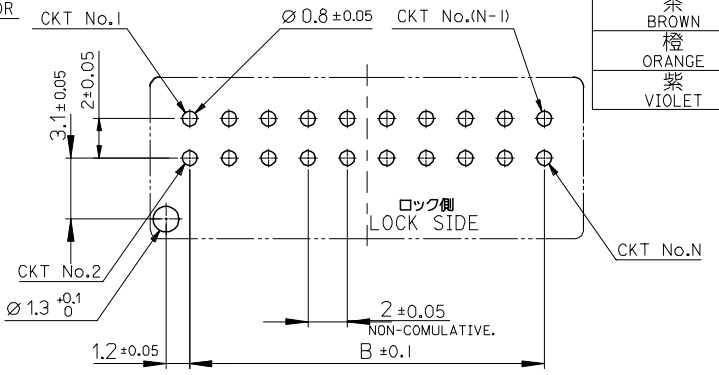
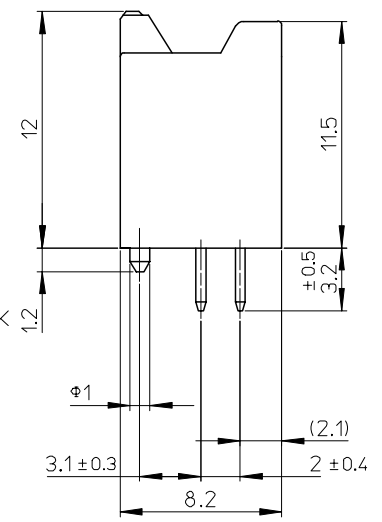
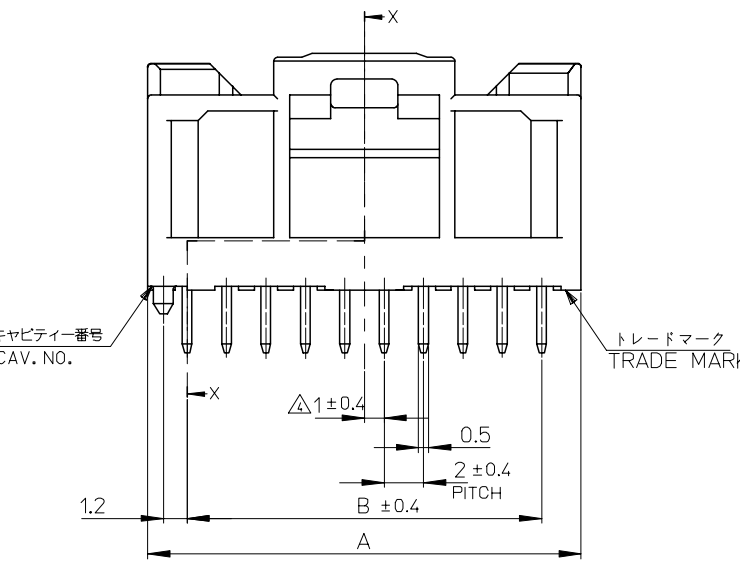
1. 材料 MATERIAL  
 ピン : 黄銅, 銅下地鍍メッキ  
 PIN : BRASS, Sn OVER COPPER PLATED  
 ハウジング : 66+1ロン(ガラス入り), UL94V-0  
 HOUSING : 66NYLON (G.F.), UL94V-0

2. 嵌合相手 : 501646 シリーズ  
 MATE WITH : 501646 SERIES

△ 製品番号 MATERIAL NO.  
**501645 - \*\*2\***  
 極数 CIRCUIT SIZE 色 COLOR

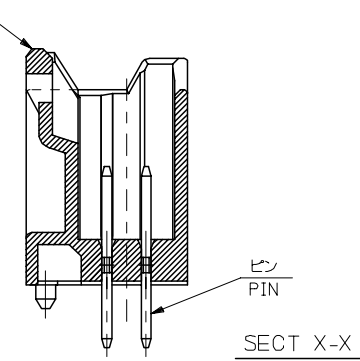
△ (全極数/2) = 偶数の場合に適用。  
 APPLY FOR (CIRCUIT/2)=EVEN

ナチュラル NATURAL	0
黒 BLACK	1
赤 RED	2
黄 YELLOW	3
青 BLUE	4
桃 PINK	5
緑 GREEN	6
茶 BROWN	7
橙 ORANGE	8
紫 VIOLET	9



基板取付穴推奨寸法 (マウント面)  
 RECOMMENDED P.C.BOARD HOLE DIMENSION (MOUNTING SIDE) (t=1.2~1.6)

9.2	40.7	38	42	501645-402*	40
9.2	38.7	36	40	-382*	38
9.2	36.7	34	38	-362*	36
9.2	34.7	32	36	-342*	34
9.2	32.7	30	34	-322*	32
9.2	30.7	28	32	-302*	30
9.2	28.7	26	30	-282*	28
9.2	26.7	24	28	-262*	26
9.2	24.7	22	26	-242*	24
9.2	22.7	20	24	-222*	22
9.2	20.7	18	22	-202*	20
9.2	18.7	16	20	-182*	18
9.2	16.7	14	18	-162*	16
9.2	14.7	12	16	-142*	14
9.2	12.7	10	14	-122*	12
7.3	10.7	8	12	501645-102*	10
D	C	B	A	△ MATERIAL NO.	CTK.



REVISED EC NO: J2006-1309 DRAWN BY DRWN:ITO CHKD:ASAKAWA APPR: S.CHIKAWA 2005/10/20 2005/10/21 2005/10/21	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	10 UNDER	± 0.2	DRAWN BY N. ITO	DATE 05/07/04	TITLE 2.0MM W/B DUAL CONN DIP PLUG ASSY ST(WITH BOSS) -LEAD FREE-		
	10 OVER 30 UNDER	± 0.25	CHECKED BY ASAKAWA	DATE 05/07/04			
	30 OVER	± 0.3	APPROVED BY ICHIKAWA	DATE 05/07/04	MOLEX INCORPORATED		
	ANGULAR	± 3 °	MATERIAL NO. 501645-**2*	DOCUMENT NO. SD-501645-001			
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					