

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

**Part Number:** [5016453820](#)  
**Status:** **Active**  
**Overview:** [igrid](#)  
**Description:** 2.00mm (.079") Pitch iGrid™ Wire-to-Board Header, Dual Row, Vertical, with PCB Locator, 38 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 [501645](#)  
 Application Wire-to-Board  
 Overview [igrid](#)  
 Product Name iGrid™

**Physical**

Breakaway No  
 Circuits (Loaded) 38  
 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

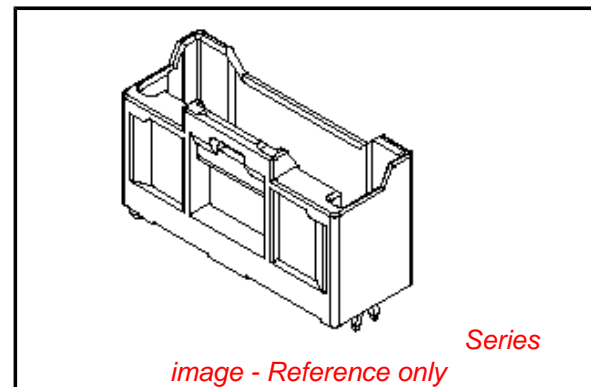
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Packaging Specification SPK-501645-001



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**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

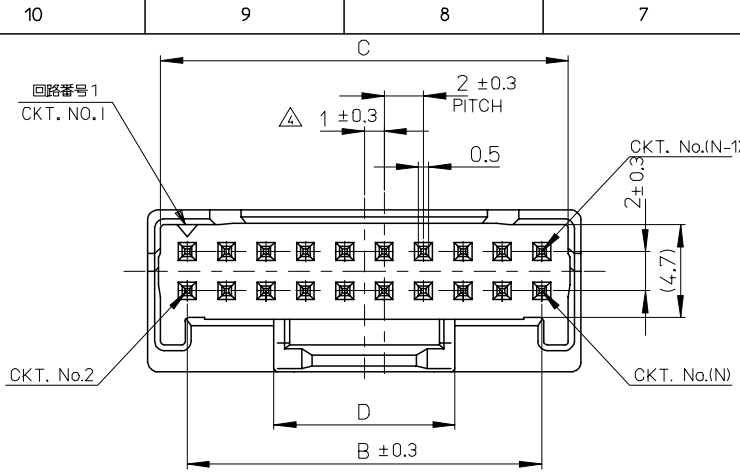
Product Specification

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

This document was generated on 05/26/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**

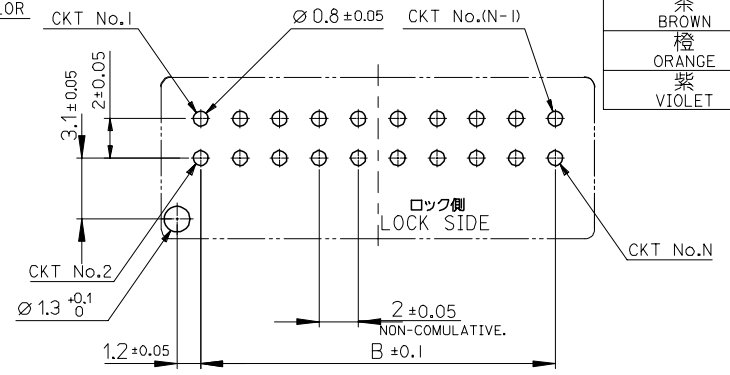
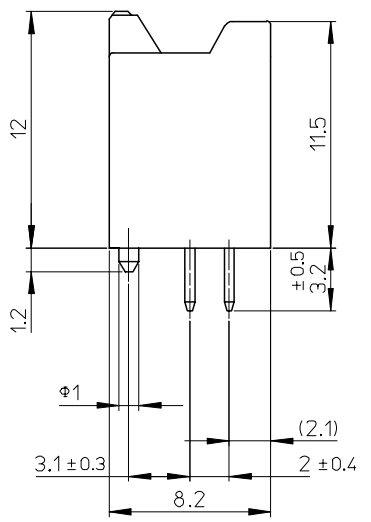
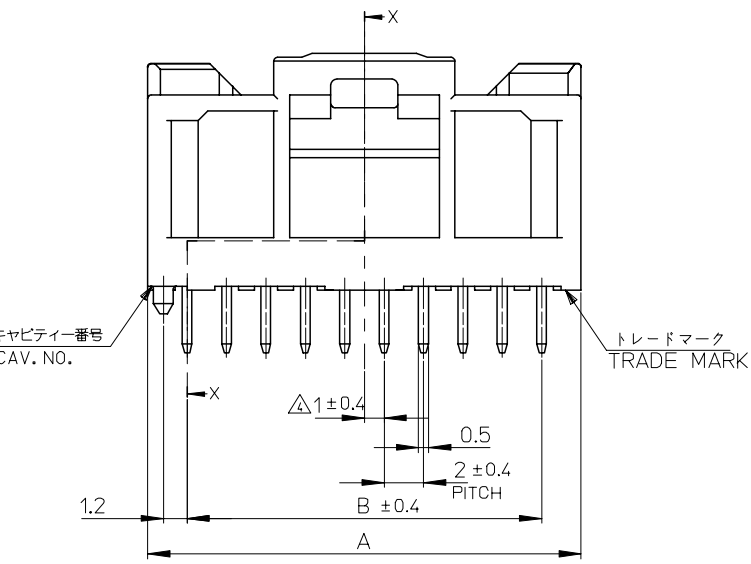


注記  
NOTES

- 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
  - 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

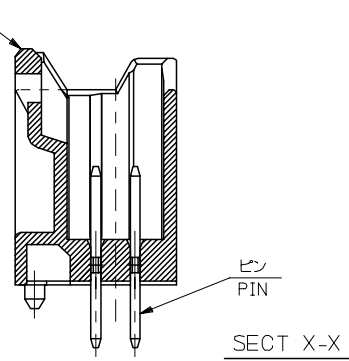
△ (全極数/2) = 偶数の場合に適用。  
APPLY FOR (CIRCUIT/2)=EVEN

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. CKT.	



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

SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION