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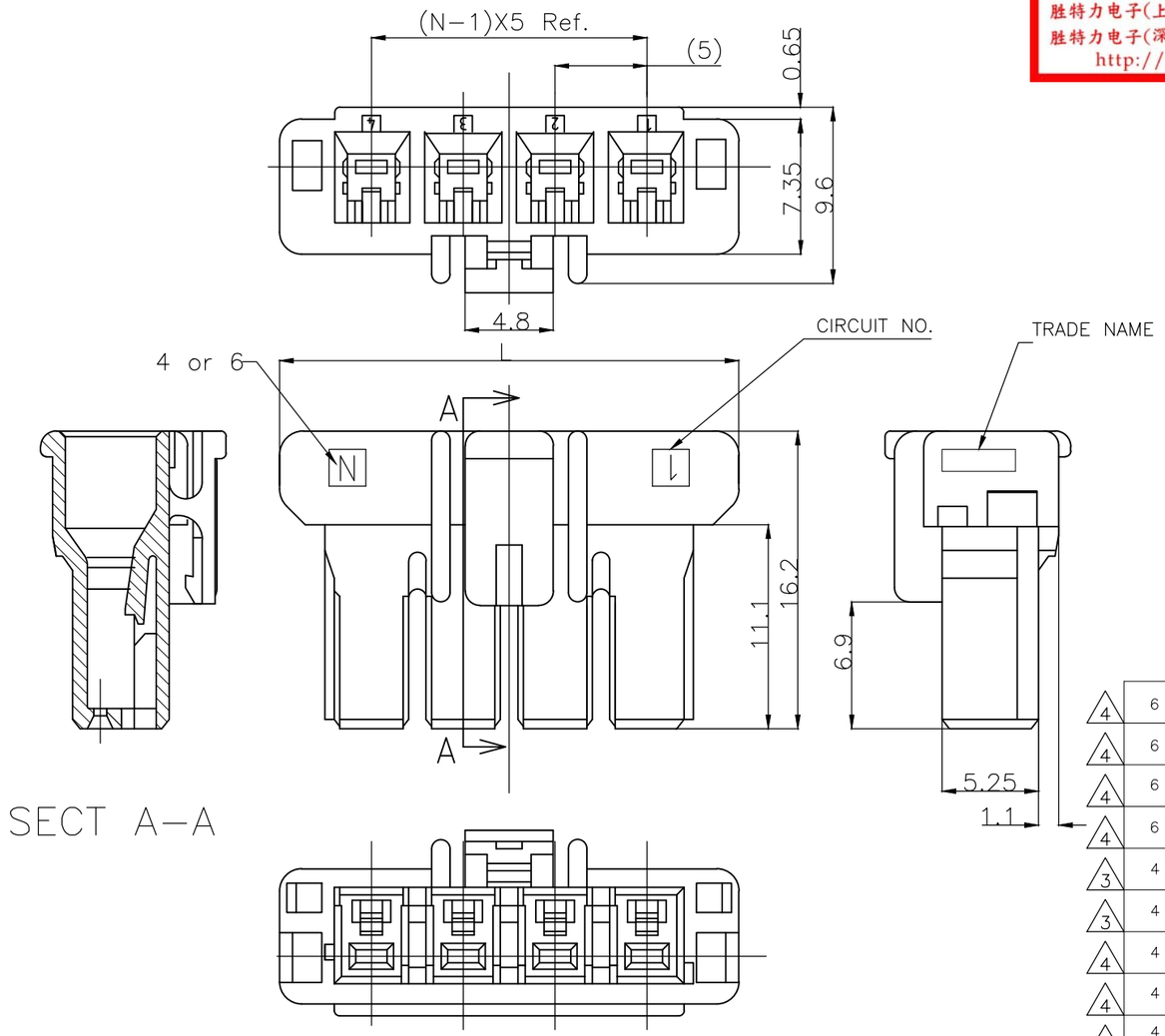
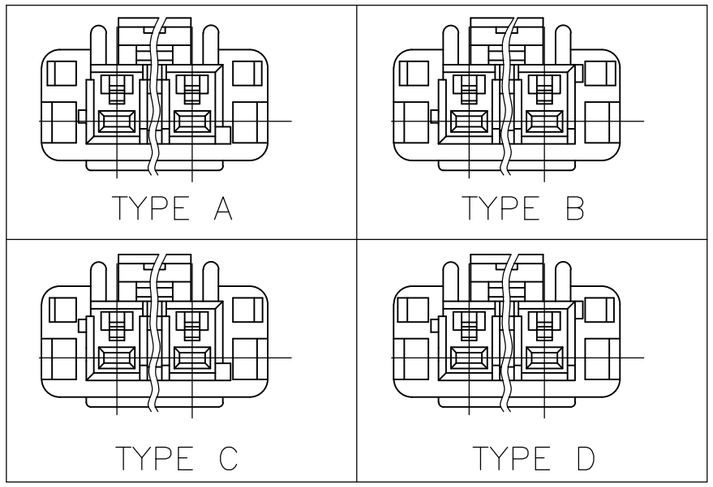
REVISIONS					
P	LTR	DESCRIPTION	DATE	DWN	APVD
	D3	REVISED PER ECO-17-008188	4JAN2018	C.X	D.Z

勝特力電材超市-龍山店 886-3-5773766
勝特力電材超市-光復店 886-3-5729570
胜特力电子(上海) 86-21-34970699
胜特力电子(深圳) 86-755-83298787
http://www.100y.com.tw



THE TYPE OF KEYING



HOSING	6/6 NYLON GRASS FILLED/ NYLON 6
NAME	MATERIAL

	N	M	L	APPLICABLE PLATE. P/N	MATING CONN. P/N	THE TYPE OF KEYING	Color	Pos	PART NO.
	DIMENSION								
4	6	25	35	1376397-1	3-1376385-4	TYPE D	YELLOW	6Pos	3-1376391-4
4	6	25	35	1376397-1	2-1376385-3	TYPE C	BLUE	6Pos	2-1376391-3
4	6	25	35	1376397-1	1-1376385-2	TYPE B	RED	6Pos	1-1376391-2
4	6	25	35	1376397-1	1376385-1	TYPE A	NATURAL	6Pos	1376391-1
3	4	15	25	1376396-1	1-1376384-5	TYPE B	RED	4Pos	1-1376390-5
3	4	15	25	1376396-1	1-1376384-6	TYPE A	NATURAL	4Pos	1376390-5
4	4	15	25	1376396-1	3-1376384-4	TYPE D	YELLOW	4Pos	3-1376390-4
4	4	15	25	1376396-1	2-1376384-3	TYPE C	BLUE	4Pos	2-1376390-3
4	4	15	25	1376396-1	1-1376384-2	TYPE B	RED	4Pos	1-1376390-2
4	4	15	25	1376396-1	1376384-1	TYPE A	NATURAL	4Pos	1376390-1

1 MATING CONN. P/N
HEADER ASS'Y :SEE TABLE
REC CONTACT ;1376347-1,1376348-1

2 PARTS COMPLY WITH GLOW WIRE REQUIREMENT FOR PARTS OF NON-METALLIC MATERIAL SUPPORTING A CURRENT-CARRYING CONNECTION DETAILED IN IEC 60335-1, SECTION 30 (GWT).

△3 NYLON 6, GWT, V-2.

△4 NYLON 66, GWT, V-0.

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm

TOLERANCES UNLESS OTHERWISE SPECIFIED:
0 PLC ± 0.2
1 PLC ± 0.2
2 PLC ± 0.2
3 PLC ±
4 PLC ±
ANGLES ± 1°

MATERIAL: SEE TABLE
FINISH: SEE TABLE

DWN A.OISHI 31AUG00
CHK Y.KASHIWA 28AUG'00
APVD Y.KASHIWA 28AUG'00
PRODUCT SPEC 108-5699
APPLICATION SPEC 104-5292
WEIGHT

TE Connectivity

NAME
5.0 POWER KEY CONNECTOR
4P PLUG HOUSING

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-1376390	—

CUSTOMER DRAWING | SCALE 3:1 | SHEET 1 OF 1 | REV D3

POWER KEY CONNECTORS

Quick Reference Guide

The TE Connectivity (TE) power key connectors are built to optimize contact seating and proper mating to the PCB header, with design features that permit the release of bubbles created by the PCB potting process. The 5.0 mm centerline connection system offers a compact 20.7 mm mated height, and is ergonomically friendly for assembly. Power key connectors are available in various colors and keys to help prevent mis-mating, and also offer double lock plates as Terminal Position Assistance (TPA) devices. The power key connector system uses housing lances to prevent tangling of wired contacts, and consists of plug housings for wire and compact wire-to-board PCB header assemblies. This connector family now includes models that are GWT compliant and meet UL 94 V-0.

FEATURES & BENEFITS

- Power circuit connector with 5.0 mm contact centerline
- Wire-to-board connectors consisting of plug housings for wires and PCB header assemblies
- With a clear clicking sound, contact insertions can be easily confirmed and the double lock plate provides for complete loading of contacts
- Locking levers are surrounded by walls, which protect levers and prevent tangling with wires
- Connector is designed to release bubbles created by the process of potting (PC board coating)
- Housing lances also help prevent tangling of wired contacts
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189
- Part numbers are GWEPT 750°C No Flame according to IEC 60335-1
- Optional double lock plates available as TPA devices
- Power key connectors meet UL 94 V-0 flammability

PRODUCT APPLICATIONS

- Household appliances
- Gas appliances
- Power cord application
- Control boards across various industries

PERFORMANCE CHARACTERISTICS

- Voltage Rating: 300 VAC[1]
- Current Rating: 10 A max[2]
- Operating Temp: -30°C to +105°C
- Applicable Wire: 24-16 AWG
- Applicable PC Board Thickness: 1.6 mm

TECHNICAL DOCUMENTS

- Product Specification - **108-5699**
- Application Specification - **114-5292**

1. Excludes header tyne round space. Usable for 150 VAC applications when the round dimensions are 3 mm or less.
2. Specified values vary according to the number of contacts and the wire used. The 10A maximum value applies to 16 AWG wire used with 2 contacts.

MATING PART NUMBERS

Single Row					
No. of Pos.	**Plug Housing**		**Applicable Double Lock Plate Part Number**	**Mating Header Assembly Part Number**	
	Keying Type/Color	**Part Number**			
2	Type A/Natural	1376388-1	1376394-1	1376382-1	
	Type B/Red	1-1376388-2	1376394-1	1-1376382-2	
	Type C/Blue	2-1376388-3	1376394-1	2-1376382-3	
	Type D/Yellow	3-1376388-4	1376394-1	3-1376382-4	
3	Type A/Natural	1376389-1	1376395-1	1376383-1	1376421-1
	Type B/Red	1-1376389-2	1376395-1	1-1376383-2	1-1376421-2
	Type C/Blue	2-1376389-3	1376395-1	2-1376383-3	2-1376421-3
	Type D/Yellow	3-1376389-4	1376395-1	3-1376383-4	3-1376421-4
4	Type A/Natural	1376390-1	1376396-1	1376384-1	
	Type B/Red	1-1376390-2	1376396-1	1-1376384-2	
	Type C/Blue	2-1376390-3	1376396-1	2-1376384-3	
	Type D/Yellow	3-1376390-4	1376396-1	3-1376384-4	
6	Type A/Natural	1376391-1	1376397-1	1376385-1	
	Type B/Red	1-1376391-2	1376397-1	1-1376385-2	
	Type C/Blue	2-1376391-3	1376397-1	2-1376385-3	
	Type D/Yellow	3-1376391-4	1376397-1	3-1376385-4	
Dual Row					
4	Type A/Natural	1376392-1	1376394-1	1376386-1	
	Type B/Red	1-1376392-2	1376394-1	1-1376386-2	
	Type C/Blue	2-1376392-3	1376394-1	2-1376386-3	
	Type D/Yellow	3-1376392-4	1376394-1	3-1376386-4	
6	Type A/Natural	1376393-1	1376395-1	1376387-1	
	Type B/Red	1-1376393-2	1376395-1	1-1376387-2	
	Type C/Blue	2-1376393-3	1376395-1	2-1376387-3	
	Type D/Yellow	3-1376393-4	1376395-1	3-1376387-4	

Included in Header Assembly product line are Tube Stick versions. Refer to the appropriate description in the catalog.

All part numbers are RoHS Compliant.

Receptacle Contacts				
Wire Range		**Wire Ins. Dia.**	**Receptacle Contact Part No.**	**Applicator Part No.**
AWG	**mm^2**			
24-20	0.22-0.53	1.89-2.7	1376348-1 (Strip Form)	1463049-2
20-16	0.5-1.25	2.0-3.1	1376347-1 (Strip Form)	1366703-2

Note: Dimensions shown are metric and all part numbers are RoHS Compliant.

DESIGN-IN QUESTIONS

1. What are the current and voltage requirements for your application?

The power key connector system has a maximum current rating of 10 A per line (based on initial t-rise vs. current testing using 16 AWG in a 2 position connector) and is rated for 300 Volts AC.

2. What are the wire type and size requirements?

The power key connector system is approved for use with 26-16 AWG wire with an insulation range between 1.3 mm and 3.1 mm.

3. What are the number of positions and available space?

The power key connector system is wire-to-board configuration, available in 2, 3, 4 and 6 positions on centerline spacing 5.0 mm. The maximum height of the wire wire-to-board system is 20.7 mm.

4. What are the operating temperature requirements?

The power key connector system has an operating temperature range from -30°C to +105°C. For more information regarding operating temperatures refer to Product Specification 108-5699.

5. Is contact back-out a concern?

To ensure the contacts are seated, the power key connector system offers an optional double lock plate. The purpose of the double lock plate as a TPA device is two-fold: 1) allows contacts to be fully seated in the housing and 2) it helps prevent the possibility of contact disengagement when wires are exposed to external pressure.

6. Do you need to differentiate this connector from other connectors in the application?

The power key connector system offers multiple options of colored housings (natural, red, blue and yellow) for easier connector identification during manufacturing and assembly. Multiple keyings are also offered to prevent mismating between different plugs and headers, and only plugs and headers with the same keying can be mated.

7. What is the benefit of choosing a plug with locking levers surrounded by walls?

The power key connector system offers walls that surround the locking levers to protect them, while also helping to prevent wires and connectors from tangling during manufacturing and assembly, potentially improving assembly efficiency.

8. What is the benefit of choosing a header with a polarization peg (boss)?

The power key connector system offers headers with polarization pegs to polarize the headers to the PCB so the header cannot be placed on the PCB in the wrong orientation. For more information regarding PCB layout please refer to the header product drawing.

9. What is the benefit of choosing a header with kink? Is the product applicable for PCB board coating?

The power key headers offers a kink in the solder tail which secures the header on the board firmly while soldering. Board mounted headers are compatible with resin or conformal coatings on PCB board, and are designed to release bubbles created by the coating process.

10. What is the benefit of choosing glow wire housings?

Power key plug housings and headers are now available in material meeting the Glow Wire test (GWEPT) requirement according to IEC 60335-1 5th edition (750°C, without flame), as well as the requirements of UL 94 V-0. Given that they meet both the GWEPT and V-0 requirements, these housings are targeted for use by manufacturers of appliances and other goods for the global market covering European, Asia Pacific and American flammability needs.

Applicable parts comply with Glow Wire flammability index (GWFI) 850°C at least, according to IEC 60335-1, Glow Wire flammability test for end-products (GWEPT) 750°C No Flame, according to IEC 60335-1 and UL 94 V-0.

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