



PowerGEM® Cable Datasheet

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Revision History

Document Control No.	Revision Date	Description of Changes
01	04/11/2018	Initial Release
02	6/1/2021	Updated logo to Unigen version Updated company information to Unigen

1. Product Overview

This document describes the 6-pin cable that is used with AgigA Tech PowerGEMs[®]. The cable is available in several lengths, and this information is shown in the ordering information section with specific part numbers.

2. Mechanical Specifications

The cable consists of:

- Two micro 1.5mm pitch Wire-to-Board Housings
- 12 Crimp Terminals
- Braided Tubing
- UL10368 AWG26 tin plating annealed copper wire, black in color, conductivity resistance 600 m ohms Max
- RoHS compliance, UL1601, UL94-0
- See Ordering Information section for details on cable length

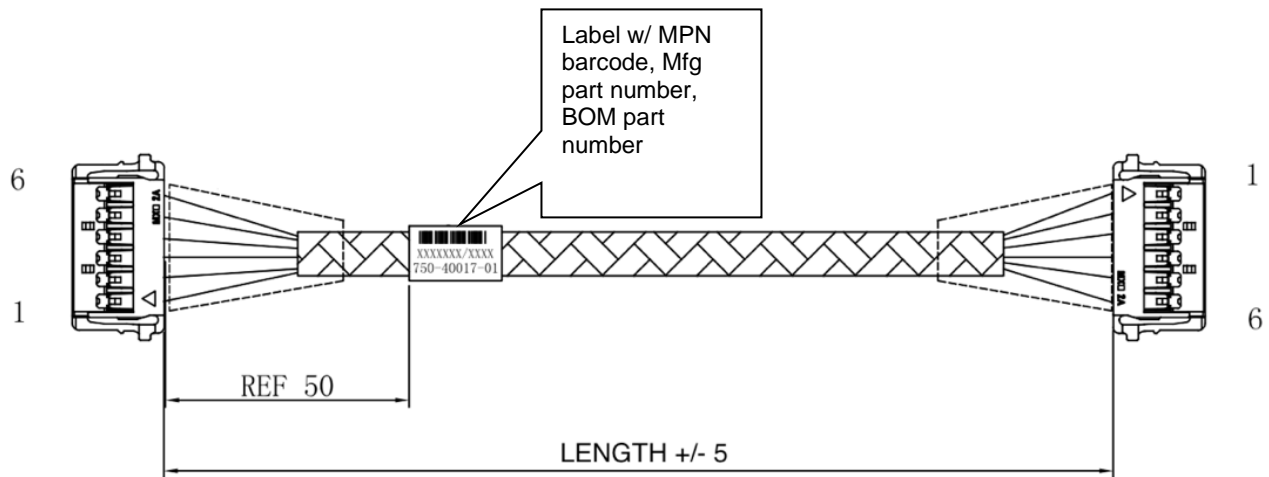


Figure 1. 6-pin Cable Drawing (Dimensions in mm)

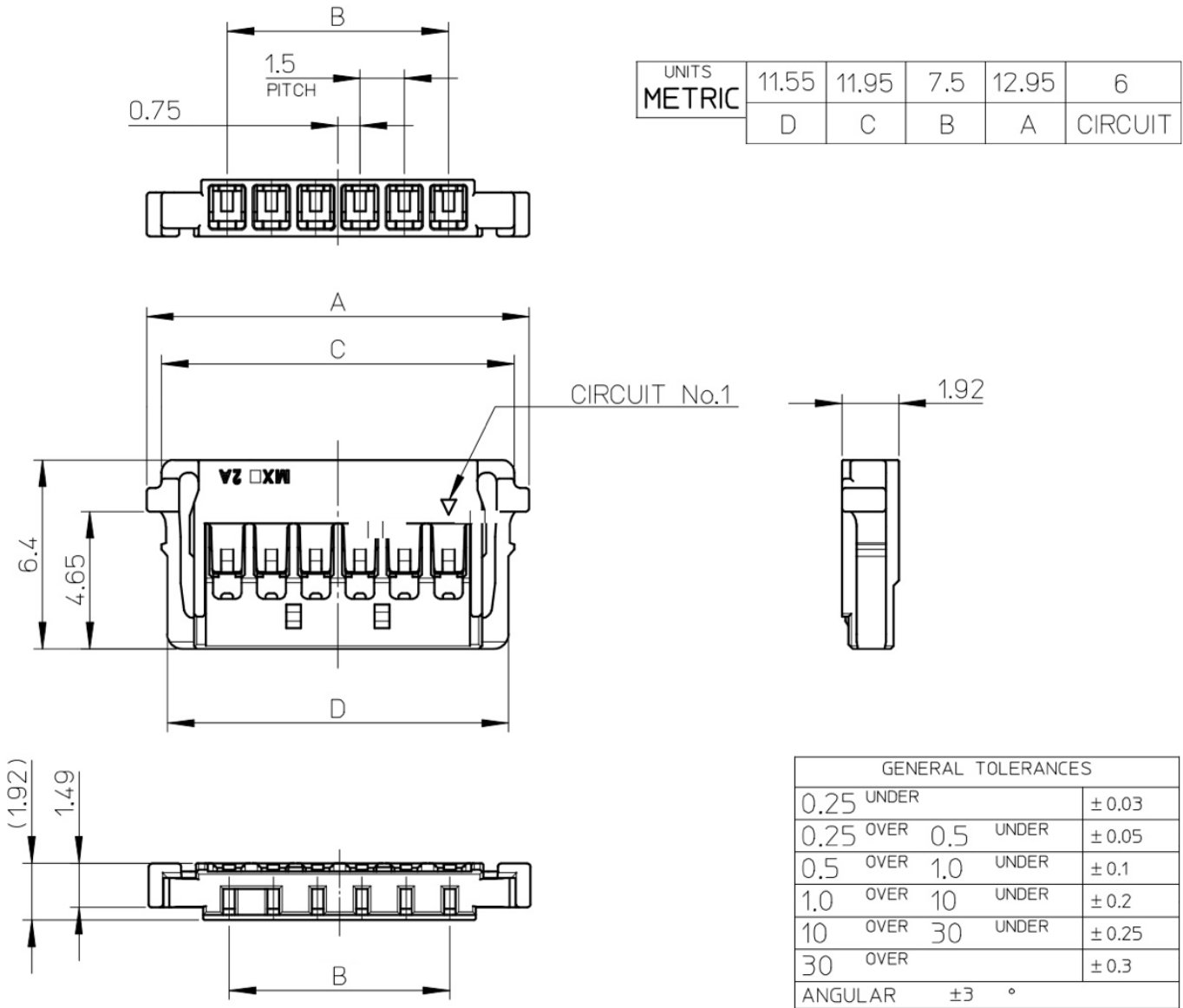


Figure 2. Micro 1.5mm pitch Wire-to-Board Housing, Variation 1

Notes:

1. Material: PA46+20%GF (DSM HFX31S), UL94V-0,
Color: Black

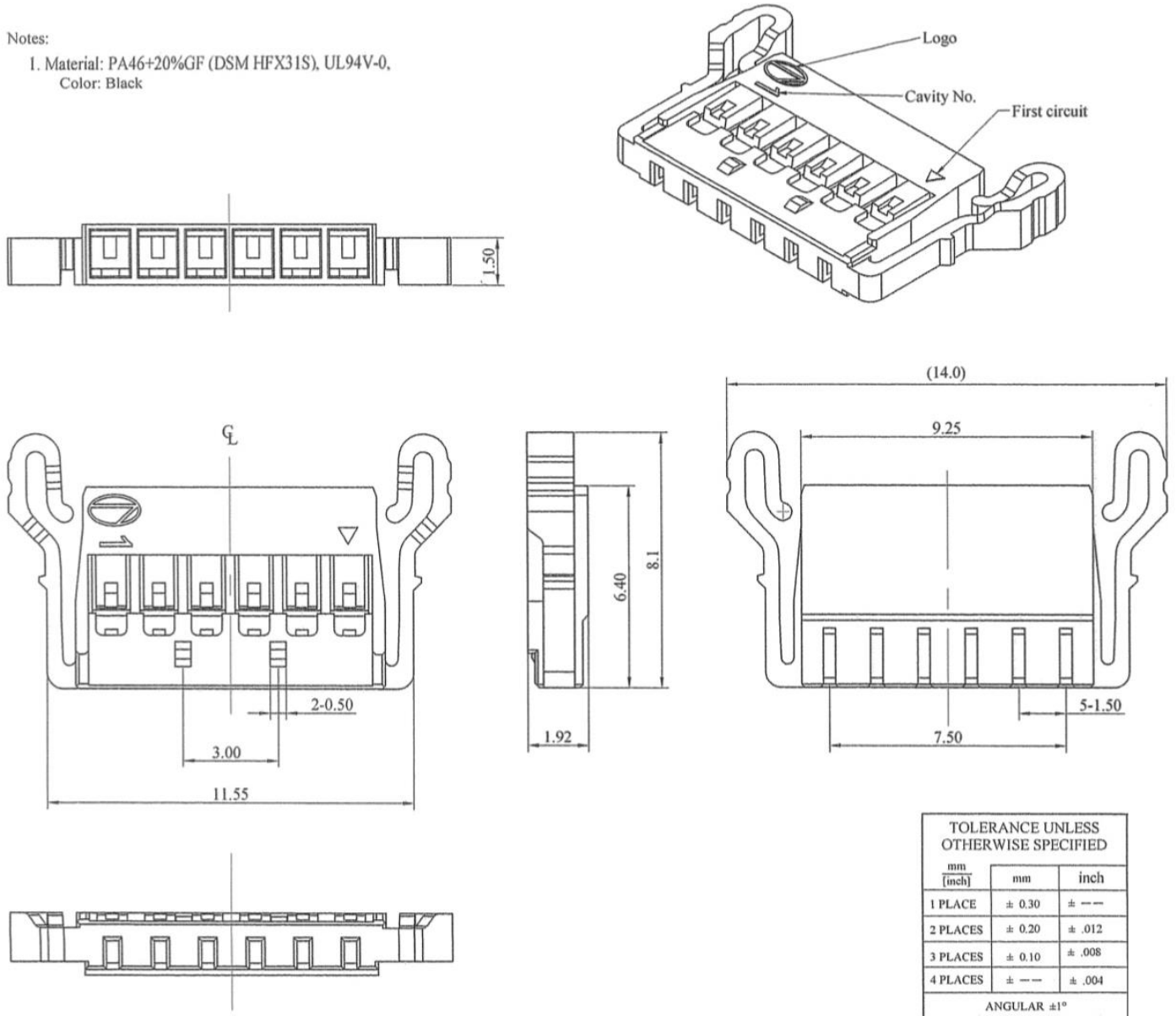


Figure 3. Micro 1.5mm pitch Wire-to-Board Housing, Variation 2

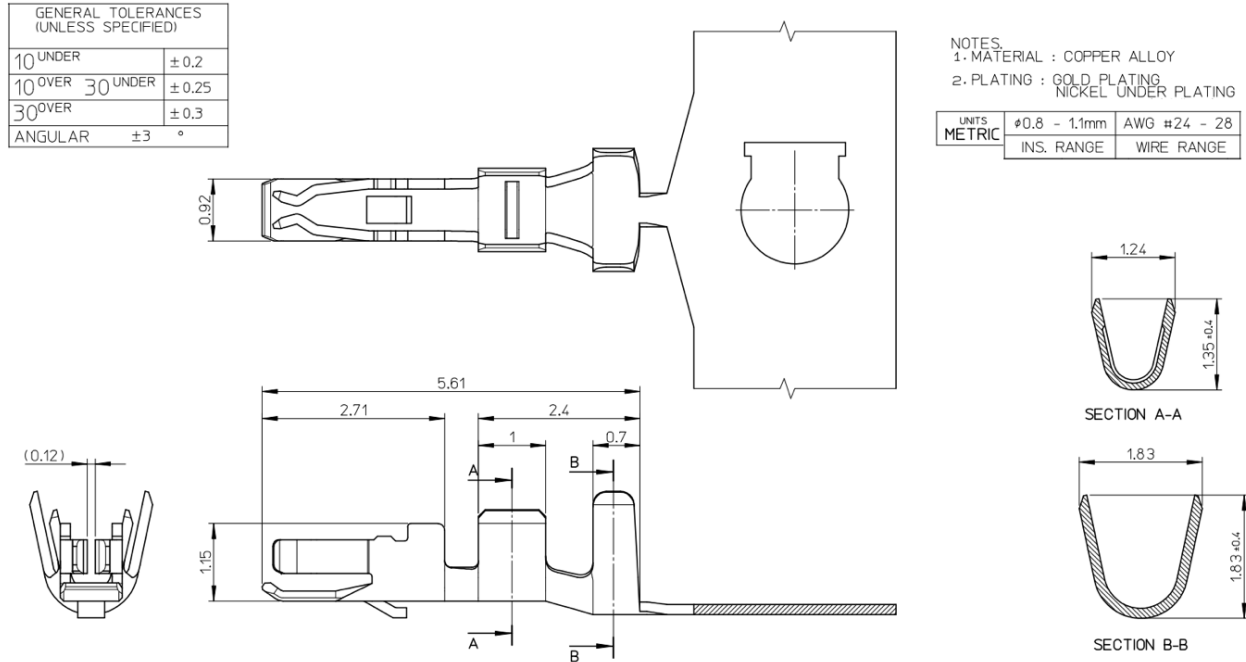


Figure 4. Crimp Terminal

3. Electrical Characteristics

Ratings		
Current rating: 2A	Operating Temperature Range: -20°C to +85°C	Storage Temperature Range: -40°C to +105°C
Voltage rating: 100V AC		
Moisture Range	Operating Moisture Range: 10% to 95%	Storage Moisture Range: 10% to 95%

Item	Specification	Condition
1. Insulation Resistance	500 M ohms Min	100 V DC
2. Withstanding Voltage	No flashover or insulation breakdown	500 V AC/1 minute
3. Contact Resistance	150 m ohms Max	100 mA
4. Insertion/Extraction Force	Insertion ≤ 17.6N(1.8kg/f), Extraction ≥ 1.18N(0.12kg/f)	
5. Durability	30 cycles Max	Mate and Unmate 30 cycles at a maximum rate of 25±3mm/min
6. Vibration	No electrical discontinuity of 1 ms	Freq: 10 to 55 Hz, single amplitude of 1.5mm, 2 hours in each of the 3 directions
7. Humidity (Steady State)	Contact resistance: 150 m ohms Max	96 hours at temperature of 40°C and humidity of 90% to 95%
8. Temperature Cycle	Contact resistance: 150 m ohms Max	-40°C 30 minutes → 105°C 30 minutes, 5 cycles

Table 1: Cable electrical characteristics

1. Ordering Part Numbers

Part Number	Cable Length
AGIGA2CBL-150ACX	150 mm
AGIGA2CBL-355ACX	355 mm
AGIGA2CBL-560ACX	560 mm
AGIGA2CBL-655ACX	655 mm
AGIGA2CBL-750ACX	750 mm
AGIGA2CBL-900ACX	900 mm