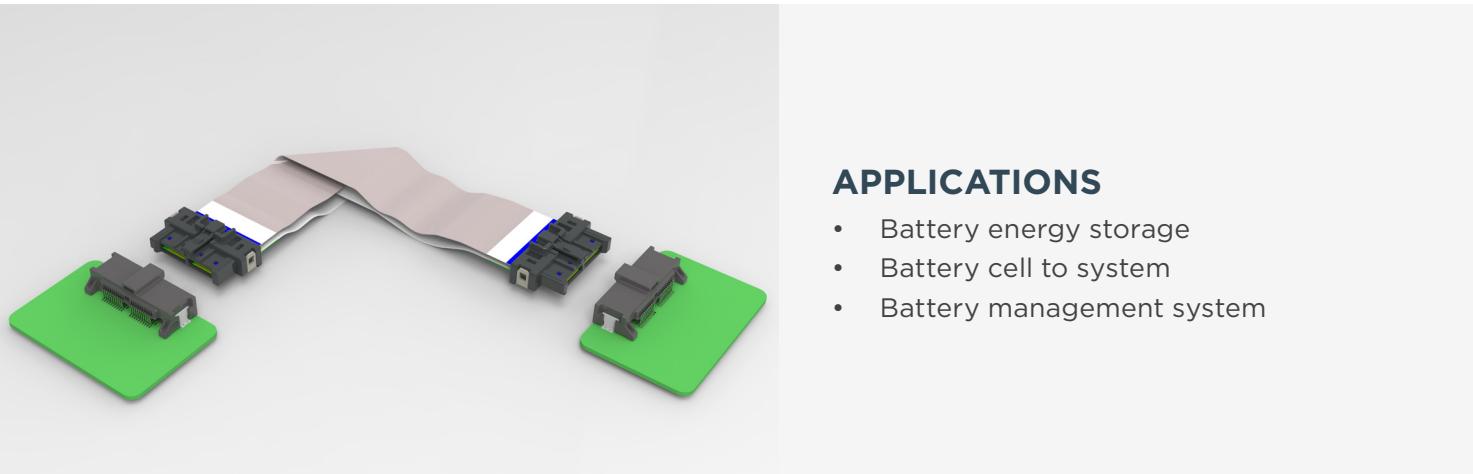


AMPFOIL ULTRA CONNECTOR

SERIES INTRODUCTION

TE Connectivity (TE)'s AMPFOIL ULTRA connector is designed to meet the needs of Flexible Flat Cable (FFC) and Flexible Printed Circuit (FPC) applications, particularly in Battery Energy Storage Systems (BESS). This advanced connector facilitates efficient connections between battery cells and Battery Management Systems (BMS).



PRODUCT HIGHLIGHTS

Miniaturized size

The AMPFOIL ULTRA connector's noteworthy plug design allows for the parallel installation of two foils, significantly increasing signal density. With a 1.0 mm pitch for the foils and a compact 0.5 mm pitch on the PCB layout, it dramatically conserves board space.

Reliable Connection and Positive Latch

The AMPFOIL ULTRA connector's positive locking mechanism helps ensure that the connection remains secure, preventing accidental unmating or loosening due to unexpected pull forces from any direction. For added convenience, the plug features a transitional sinking surface, making it easier to unlatch when needed.

Easily Assembly for Plug

The plug assembly for AMPFOIL ULTRA connector is quick and simple by two steps without any additional tools.

High Performance in Vibration and Aging

The AMPFOIL ULTRA connector meets the rigorous vibration performance standards of LV 214, achieving Severity 2. For aging performance, the AMPFOIL ULTRA connector complies with the USCAR-2 standard. This confirms the connector's ability to maintain its electrical and mechanical performance even under prolonged, demanding conditions.

APPLICATIONS

- Battery energy storage
- Battery cell to system
- Battery management system

PERFORMANCE

Series	AMPOFOIL ULTRA Connector
Pitch	1.0 mm
Rated voltage (max.)	29.6 V AC
Rated current (max.)	1A
Contact resistance	30mΩ Max
Withstanding voltage	500V AC
Operating temperature	-40 °C ~ 125 °C

MATERIALS AND PLATING

Category	Material
Contact	Copper alloy
Plating in mating area	Gold
Plastic housing	UL94 V-0 high temperature thermoplastic, black
Retention pin	Copper alloy

PRODUCT SPECIFICATION AND INSTRUCTION SHEET

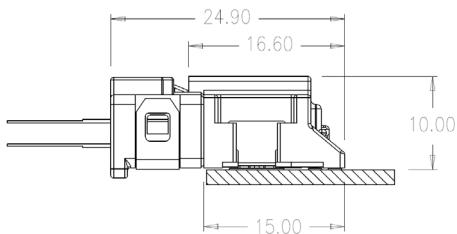
Product specification	108-137689
Test report	501-137689
Application Specification	114-137689 (for receptacle connector assembly)

CONFIGURATIONS

Pos.	Key	Plug kit assembly	Board-mounting header
-	-		
40	1	1-2834723-1	1-2834696-1
	2	2-2834723-1	2-2834696-1
	3	3-2834723-1	3-2834696-1
	4	4-2834723-1	4-2834696-1
36	1	1-2834723-2	1-2834696-2
	2	2-2834723-2	2-2834696-2
	3	3-2834723-2	3-2834696-2
	4	4-2834723-2	4-2834696-2
32	1	1-2834723-3	1-2834696-3
	2	2-2834723-3	2-2834696-3
	3	3-2834723-3	3-2834696-3
	4	4-2834723-3	4-2834696-3
28	1	1-2834723-4	1-2834696-4
	2	2-2834723-4	2-2834696-4
	3	3-2834723-4	3-2834696-4
	4	4-2834723-4	4-2834696-4
24	1	1-2834723-5	1-2834696-5
	2	2-2834723-5	2-2834696-5
	3	3-2834723-5	3-2834696-5
	4	4-2834723-5	4-2834696-5

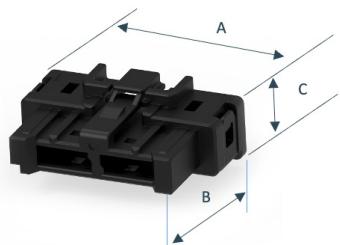
MATED DIMENSIONS

Units: mm

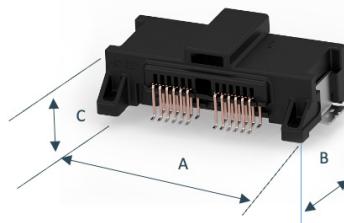


EXTERNAL DIMENSIONS

Plug kit assembly (status of spacer and foil installed)



Board-Mounting Header



Pos.	Key	Part Number	Dimensions (mm)		
			A	B	C
40	1	1-2834723-1	36.80	19.50	10.80
	2	2-2834723-1			
	3	3-2834723-1			
	4	4-2834723-1			
36	1	1-2834723-2	34.80	19.50	10.80
	2	2-2834723-2			
	3	3-2834723-2			
	4	4-2834723-2			
32	1	1-2834723-3	32.80	19.50	10.80
	2	2-2834723-3			
	3	3-2834723-3			
	4	4-2834723-3			
28	1	1-2834723-4	30.80	19.50	10.80
	2	2-2834723-4			
	3	3-2834723-4			
	4	4-2834723-4			
24	1	1-2834723-5	28.80	19.50	10.80
	2	2-2834723-5			
	3	3-2834723-5			
	4	4-2834723-5			

Pos.	Key	Part Number	Dimensions (mm)		
			A	B	C
40	1	1-2834696-1	40.19	16.60	10.00
	2	2-2834696-1			
	3	3-2834696-1			
	4	4-2834696-1			
36	1	1-2834696-2	38.19	16.60	10.00
	2	2-2834696-2			
	3	3-2834696-2			
	4	4-2834696-2			
32	1	1-2834696-3	36.19	16.60	10.00
	2	2-2834696-3			
	3	3-2834696-3			
	4	4-2834696-3			
28	1	1-2834696-4	34.19	16.60	10.00
	2	2-2834696-4			
	3	3-2834696-4			
	4	4-2834696-4			
24	1	1-2834696-5	32.19	16.60	10.00
	2	2-2834696-5			
	3	3-2834696-5			
	4	4-2834696-5			

About TE Connectivity

TE Connectivity plc (NYSE: TEL) is a global industrial technology leader creating a safer, sustainable, productive, and connected future. Our broad range of connectivity and sensor solutions enable the distribution of power, signal and data to advance next-generation transportation, energy networks, automated factories, data centers, medical technology and more. With more than 85,000 employees, including 9,000 engineers, working alongside customers in approximately 130 countries, TE ensures that **EVERY CONNECTION COUNTS**. Learn more at www.te.com and on [LinkedIn](#), [Facebook](#), [WeChat](#) and [Instagram](#).

Connect With Us

We make it easy to connect with our experts and are ready to provide the support you need. Visit te.com/support to chat with a Product Information Specialist.

te.com

TE, TE Connectivity, TE connectivity (logo), and **EVERY CONNECTION COUNTS** are trademarks owned or licensed by the TE Connectivity plc family of companies. Other product names, logos, and company names mentioned herein may be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this document, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any changes to the information contained herein without prior notice. TE Connectivity assumes only those obligations set forth in the terms and conditions for this product and shall in no event be liable for any incidental, indirect, or consequential damages arising out of the sale, resale, use, or misapplication of the product. TE expressly disclaims any implied warranties with respect to the information contained herein, including, but not limited to, implied warranties of merchantability or fitness for a particular purpose. Dimensions, specifications and/or information contained herein are for reference purposes only and are subject to change without notice. Consult TE for the latest dimensions, specifications and/or information. Users of TE Connectivity products must make their own assessment as to whether the respective product is suitable for the respective desired application.

©2025 TE Connectivity. All Rights Reserved.

AK 09-25