## **Amphenol SOCAPEX**

# **SMASH Series**

**High-Density and High-Performances PCB connector** 

## **Description**

The SMASH connectors offers a very robust and highly reliable interconnect solution, perfactly suited to a wide variety of environments and applications.

It offers a very modular and very high-density solution thanks to its 2 electrical insert sizes, its chevron pattern and its 1.905mm [.075] pitch on 6 rows.

Based on an aluminium shell with 1, 2 or 3 electrical inserts, the SMASH connector can house up to 450 contacts.

## **Main Features**

#### RUGGEDIZATION

- Aluminium shell for electrical and environmental enhancements
- Ruggedized connector to meet extreme conditions in harsh environment

#### **HIGH-PERFORMANCES**

- Excellent mechanical, electrical and environmental reliability
- Extreme environmental performances
- Proven 6-fingers contact design to maintain elctrical contact through high vibration and shock

#### HIGH-DENSITY AND MODULARITY

- 1.905mm [.075] pitch on 6 rows and chevron grid pattern
- 2 electrical inserts sizes with 132 or 150 signal contacts
- 3 connector versions with 1, 2 or 3 electrical inserts
- 6 arrangements from 132 to 450 signal contacts
- Straight PC tail or Press fit contact termination available for plug and receptacle
- · Flexible circuit termination of the plug can be used with daughter cards of various thicknesses

## **Online configurator & 3D model download**

You can define references according to your needs and download directly 3D models in several formats on SMASH product page in our website www.amphenol-socapex.com or scan QR code :





## **Markets & Applications**



Commercial Aerospace







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## **SMASH** Series

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## **Technical Specifications**

MECHANICAL CHARACTERISTICS		MIL-DTL-55302 sections	
Backoff¹ (mm)	1.2 <sub>MAX</sub> [.047]	-	
Mating force per contact (N)	1	S 4 E 4	
Unmating force per contact (N)	0.4	··· § 4.5.4	
Durability cycles	500	§ 4.5.9	
Sinusoidal vibrations (10 to 2000 Hz) micro discontinuity 2ns	15 g	§ 4.5.10	
Random vibrations (600 to 700 Hz) no discontinuity greater than 2ns	2.682 g² / Hz	EFA level	
Shocks no discontinuity greater than 2ns	100 g / 6s	§ 4.5.14	
ENVIRONMENTAL CHARACTERISTICS			
Thermal shocks (°C) Number of cycles	-65 / +150 5	§ 4.5.13	
Salt Spray (hours)	144	§ 4.5.11	
<b>Humidity</b> Days Temperature (°C) Humidity Rate (%)	10 25/65 90/98	§ 4.5.15	
ELECTRICAL CHARACTERISTICS			
Current rating per contacts (A)	3 <sub>MAX</sub>	§ 4.5.5	
Insulation resistance (GΩ)	5 <sub>MIN</sub>	§ 4.5.8	
Contact resistance (mΩ)	10 <sub>MAX</sub>	§ 4.5.12	
Dielectric Withstanding Voltage (Vrms)	1000 <sub>MIN</sub>	§ 4.5.7.1	
Service voltage (at 50 Hz) (Vrms)	250	-	

1: When both connectors are fully mated, the backoff is the maximum distance the connectors can be unmated while functioning properly

## How to order

		1.	2.	3.		4.	5.
Series HDC		Connector type	Number of signal contacts	Contact termination type YD		Deviation	Contact tail finish
		Е	150			-000	
l. Co	nnector	type	2. Number of signa	al contacts	<b>3</b> . Co	ntact termination	type
F	Plug (N	lale contacts)	132 1 insert		YD	Straight PC tail	
		· · · · · · · · · · · · · · · · · · ·			YP	Press fit	
E	Receptacle (Female contacts)	264 300 2 inserts		U01	Surface Mount do	uble sided (Plug only)	
				Z	Solder Cup (Plug only)		
			396				
			450 3 inserts				

4. Deviation		5. Contact tail finish		
-000	Standard	Blank	Gold on YD and YP male contacts 🗸	
Consult us	Specific version	Diam	Tin-Lead on U01 male contacts and YD and YP female contacts	
	i •	LF	Pure Tin on YD female contacts only 🗸	

✓ : RoHS compliant

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Designed by Amphenol Socapex DOC-000085-ANG - October 2023