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 electrical 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 _{MAX} [.047]	-	
Mating force per contact (N)	1	S A E A	
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	
Humidity Days Temperature (°C) Humidity Rate (%)	10 25/65 90/98	§ 4.5.15	
ELECTRICAL CHARACTERISTICS			
Current rating per contacts (A)	3 _{MAX}	§ 4.5.5	
Insulation resistance (GΩ)	5 _{MIN}	§ 4.5.8	
Contact resistance (mΩ)	10 _{мах}	§ 4.5.12	
Dielectric Withstanding Voltage (Vrms)	1000 _{MIN}	§ 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	
1 . Co	nnector	type	2. Number of signa	I contacts	3 . Co	ntact termination	type
F	Plua (N	/ale 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		Tin-Lead on U01 male contacts and YD and YP female contacts	
		LF	Pure Tin on YD female contacts only	

✓ : RoHS compliant

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