

https://www.phoenixcontact.com/us/products/1156939



Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

SMD pin header, nominal current: 3 A, test voltage: 500 V AC, number of positions: 10, pitch: 2. 54 mm, color: black, contact surface: Au, contact connection type: Pin, mounting: SMD soldering



#### Your advantages

- · Reliable mechanical and electrical connections thanks to the double-sided contact system
- · Designed for integration into the SMT soldering process
- · Clear and cost-optimized design
- · Suitable for a multitude of applications
- · Stacked, coplanar or orthogonal PCB connections enable maximum flexibility in the device

#### Commercial data

Item number	1156939
Packing unit	390 pc
Minimum order quantity	390 pc
Sales key	AA24
Product key	AAXGBA
GTIN	4063151159092
Weight per piece (including packing)	1.214 g
Weight per piece (excluding packing)	1.214 g
Customs tariff number	85366930
Country of origin	CN



https://www.phoenixcontact.com/us/products/1156939



#### Technical data

#### Notes

Notes on operation	The permissible voltage during operation depends on the
	application, taking into consideration the air clearances and
	creepage distances within the scope of insulation requirements in
	accordance with IEC 60664-1.

#### Product properties

Product type	SMD pin header
Product family	FQ 2,54D/PH
Number of positions	10
Pitch	2.54 mm
Number of rows	2
Pin layout	Linear pad geometry

#### Electrical properties

#### Properties

•	
Nominal current I <sub>N</sub>	3 A (at 20°C 80-pos.)
Contact resistance	20 mΩ
Test voltage	500 V AC IEC 60512-4-1:2003-05

#### **Dimensions**

Dimensional drawing	P
Pitch	2.54 mm
Width [w]	12.7 mm
Height [h]	6.28 mm
Length [I]	16.1 mm
Installed height	5.08 mm
Application	
Contact cover	0.4 mm
Wipe length	1.3 mm
PCB design	
Pad geometry	1.3 x 2.8 mm

#### Material specifications

Material	data -	contact
----------	--------	---------

Note	WEEE/RoHS-compliant, free of whiskers according to IEC



https://www.phoenixcontact.com/us/products/1156939



	60068-2-82/JEDEC JESD 201
Contact material	Cu alloy
Surface characteristics	Selective coating
Metal surface contact area (top layer)	Gold (Au)
Metal surface contact area (middle layer)	Nickel (Ni)
Metal surface soldering area (top layer)	Tin (Sn)
Material data - housing	
Color (Housing)	black (9005)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
nnector Connection 1	
Insulating material	PA

#### Electrical tests

#### Thermal test | Test group C

CTI according to IEC 60112

Specification	IEC 60512-5-2:2002-02
Tested number of positions	80
Insulation resistance	
Specification	IEC 60512-3-1:2002-02
Insulation resistance, neighboring positions	> 1 GΩ
Air clearances and creepage distances	
Insulating material group	T
Minimum value for clearance and creepage distance	0.4 mm

600

#### Mechanical tests

#### Insertion and withdrawal forces

Result	Test passed
No. of cycles	100
Insertion strength per pos. approx.	2.9 N
Withdraw strength per pos. approx.	2.9 N
Visual inspection	
Specification	IEC 60512-1-1:2002-02
Result	Test passed
Dimension check	
Specification	IEC 60512-1-2:2002-02



https://www.phoenixcontact.com/us/products/1156939



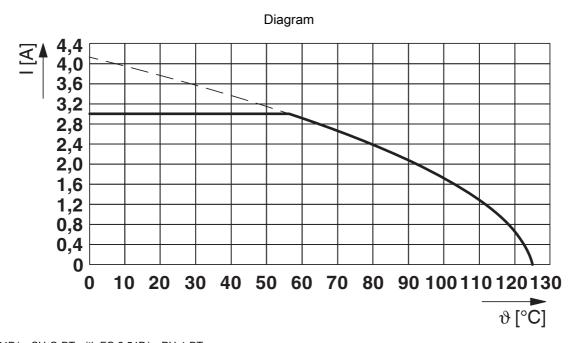
Result	Test passed
nvironmental and real-life conditions	
Vibration test	
Specification	IEC 60068-2-6:2007-12
Frequency	10 - 55 - 10 Hz
Sweep speed	1 octave/min
Amplitude	1.52 mm
Acceleration	181 m/s²
Test duration per axis	2 h
Test directions	X-, Y- and Z-axis
Durability test	
Specification	IEC 60512-9-1:2010-03 (following)
Contact resistance R <sub>1</sub>	20 mΩ
Contact resistance R <sub>2</sub>	30 mΩ
Insertion/withdrawal cycles	100
Insulation resistance, neighboring positions	> 1 GΩ
Ambient conditions	
Ambient temperature (operation)	-40 °C 125 °C
Ambient temperature (storage/transport)	-40 °C 70 °C
Relative humidity (storage/transport)	30 % 70 %
Ambient temperature (assembly)	-5 °C 100 °C
lounting	
Mounting type	SMD soldering
Pin layout	Linear pad geometry
Processing notes	
Process	Reflow soldering
Moisture Sensitive Level	MSL 1
Classification temperature T <sub>c</sub>	260 °C
ackaging specifications	
Type of packaging	Tube magazine



https://www.phoenixcontact.com/us/products/1156939



### Drawings



Type: FQ 2,54D/...-SH-O-BT with FQ 2,54D/...-PH-1-BT



https://www.phoenixcontact.com/us/products/1156939



### **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1156939

e <b>911</b> us	cULus Recognize Approval ID: E118976	ed			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
keine					
		30 V	3 A	-	-



1156939

https://www.phoenixcontact.com/us/products/1156939

### Classifications

#### **ECLASS**

	ECLASS-13.0	27460201	
	ECLASS-15.0	27460201	
ETIM			
	ETIM 9.0	EC002637	
UNSPSC			
	UNSPSC 21.0	39121400	



https://www.phoenixcontact.com/us/products/1156939



### Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions		
China RoHS			
Environment friendly use period (EFUP)	EFUP-E		
	No hazardous substances above the limits		
EU REACH SVHC			
REACH candidate substance (CAS No.)	No substance above 0.1 wt%		

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com