

1156905

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SMD socket, nominal current: 3 A, Test voltage: 500 V AC, number of positions: 30, pitch: 2.54 mm, color: black, contact surface: Au, contact connection type: Socket, 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	1156905
Packing unit	130 pc
Minimum order quantity	130 pc
Sales key	AA24
Product key	AAXABA
GTIN	4063151159771
Weight per piece (including packing)	4.4 g
Weight per piece (excluding packing)	4.4 g
Customs tariff number	85366930
Country of origin	CN



1156905

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# 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 family	FQ 2,54D/SH
	1 Q 2,54D/011
Number of positions	30
Pitch	2.54 mm
Number of rows	2
Pin layout	Linear pad geometry
Electrical characteristic	shielded

### Data management status

Article revision	00

### Electrical 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
Electrical characteristic	shielded

#### **Dimensions**

Dimensional drawing	P <sub>1</sub> n
Pitch	2.54 mm
Width [w]	38.5 mm
Height [h]	5 mm
Length [I]	15.74 mm
Installed height	5 mm
Application	
Contact cover	0.4 mm
Wipe length	1.3 mm
PCB design	
Pad geometry	1.04 x 1.32 mm



1156905

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### Material specifications

#### Material data - contact

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

#### Connector

### Connection 1

Insulating material	PA
CTI according to IEC 60112	600

### Electrical tests

### Thermal test | Test group C

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

#### 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	

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Specification	IEC 60512-1-1:2002-02
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1156905

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Type of packaging

Result	Test passed
imension check	
Specification	IEC 60512-1-2:2002-02
Result	Test passed
vironmental and real-life conditions	
When the standard	
Vibration test Specification	IEC 60068-2-6:2007-12
· · · · · · · · · · · · · · · · · · ·	10 - 55 - 10 Hz
Frequency	
Sweep speed	1 octave/min
Amplitude	1.52 mm 181 m/s²
Acceleration	2 h
Test duration per axis Test directions	X-, Y- and Z-axis
rest directions	A-, 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
punting	
Mounting type	SMD soldering
Pin layout	Linear pad geometry
Processing notes	
Process	Reflow soldering
Moisture Sensitive Level	MSL 1
	260 °C

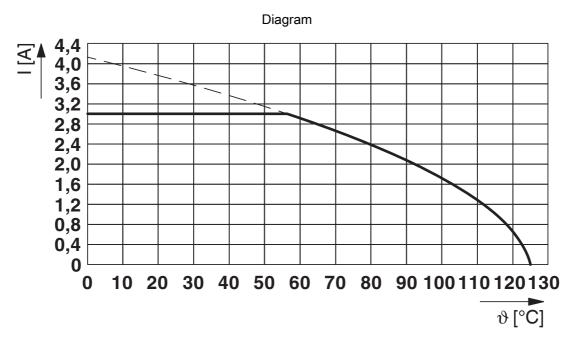
Tube magazine



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# Drawings



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



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# **Approvals**

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c <b>711</b> us	cULus Recognized Approval ID: E118976				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	3 A	-	-



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# Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27460201	
ECLASS-12.0	27460201	
ECLASS-13.0	27460201	
ETIM		
ETIM 9.0	EC002637	
UNSPSC		

39121400



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# 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%

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