

Product Data Sheet

One27 IDC Female,
Part No. 404-59050-61



Illustration similar



Cable-to-Board



High Density



Rugged

- For IDC connection with AWG 30/7 ribbon cable
- contact wipe 1.5 mm
- number of positions 50 in a pitch of 1.27 mm
- pitch ribbon cable 0.635 mm
- Performance Level 1
- The IDC spring-loaded connector (Female) is intended for use in cable assembly. Please follow the processing instructions.



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» to product group One27

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Technical Specifications

Basics

No. of Contacts	50
Termination Technology	SMT
Operating Temperature Range	-55°C to +125°C (depending on the type of cable used)

Material

Insulator Material	LCP, UL 94 V-0
CTI value <i>IEC 60112</i>	175
Contact Material	copper alloy
Plating	gold over palladium-nickel over nickel
Termination area	tin over nickel

Mechanical

Pitch	1.27 mm
Mating Force per Pin	≤ 0.5 N
Separating Force per Pin	≥ 0.1 N
Durability <i>IEC 60512-9-1</i>	performance level 1: 500 mating cycles
Vibration, sinusoidal <i>IEC 60512-6-4</i>	10–2000 Hz, 20 g
Contact mating problems if vibrations occur, sinusoidal <i>IEC 60512-2-5</i>	≤ 1 μ s
Shock, semi-sinusoidal <i>IEC 60512-6-3</i>	50 g, 11 ms
Contact mating problems if shock occur, semi-sinusoidal <i>IEC 60512-2-5</i>	≤ 1 μ s
Overmating Distance	0.9 mm
Wipe length	1.5 mm
Center offset	± 0.7 mm
Axial offset when mated (x/y)	± 0.4 mm
Angular offset longitudinally	$\pm 4^\circ$
Angular offset transversally	$\pm 2^\circ$

Electrical

Test Voltage <i>IEC 60512-4-1</i>	500 VAC
Contact Resistance <i>IEC 60512-2-1</i>	≤ 25 m Ω Spring --> meter ≤ 10 m Ω IDC --> Cable
Clearance and Creepage	at least 0.4 mm
Insulation Resistance <i>IEC 60512-3-1</i>	≥ 10 G Ω

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Technical Specifications

Approval / Compliance

UL file	E130314
Environment	RoHS compliant

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Modifications

Available on request

- other pole counts
- other quality grades

Drawings

Component data in 2D and 3D format you can download here:

[» PDF](#)

[» 3D IGES](#)

[» 3D STEP](#)

[» 3D PDF](#)