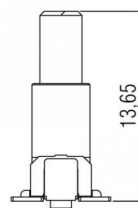
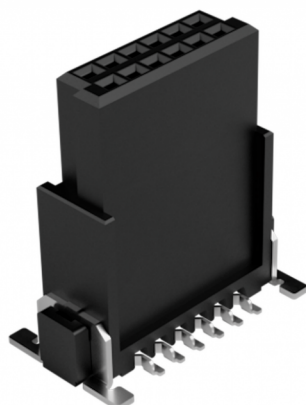


# Product Data Sheet

One27 Female high-profile,  
Part No. 404-54012-51



12 Pins

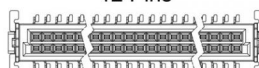


Illustration similar



Parallel



Perpendicular



SMT



High Density



Rugged

- 12 pins
- unmated stacking height: 13.65 mm
- for board-to-board distances from 15.4 to 20.0 mm
- SMT
- pitch 1.27 mm
- Performance level 1



» to product on [www.ept.de](http://www.ept.de)



» to product group One27

# Product Data Sheet

One27 Female high-profile,  
Part No. 404-54012-51



## Technical Specifications

### Basics

|                             |                  |
|-----------------------------|------------------|
| No. of Contacts             | 12               |
| Termination Technology      | SMT              |
| Board-to-Board Distance     | 15.4 to 20.0 mm  |
| Operating Temperature Range | -55°C to + 125°C |

### Material

|                               |                      |
|-------------------------------|----------------------|
| Insulator Material            | LCP, UL 94 V-0       |
| CTI value<br><i>IEC 60112</i> | 175                  |
| Contact Material              | Copper alloy         |
| Plating                       | Au over PdNi over Ni |
| Termination area              | Sn over Ni           |

### Mechanical

|                                                                                 |                                        |
|---------------------------------------------------------------------------------|----------------------------------------|
| Pitch                                                                           | 1.27 mm                                |
| Mating Force per Pin                                                            | $\leq 0.5$ N                           |
| Separating Force per Pin                                                        | $\geq 0.1$ N                           |
| Durability<br><i>IEC 60512-9-1</i>                                              | Performance level 1: 500 mating cycles |
| Coplanarity                                                                     | $\leq 0.1$ mm                          |
| Vibration, sinusoidal<br><i>IEC 60512-6-4</i>                                   | 10 - 2000 Hz, 20g                      |
| Contact mating problems if vibrations occur, sinusoidal<br><i>IEC 60512-2-5</i> | $\leq 1$ $\mu$ s                       |
| Shock, semi-sinusoidal<br><i>IEC 60512-6-3</i>                                  | 50g, 11 ms                             |
| Contact mating problems if shock occur, semi-sinusoidal<br><i>IEC 60512-2-5</i> | $\leq 1$ $\mu$ s                       |

### Electrical

|                                               |                                                               |
|-----------------------------------------------|---------------------------------------------------------------|
| Operational Current<br><i>IEC 60512-5-2</i>   | 3.1 A at 20°C (4 of 50 pins)<br>1.4 A at 20°C (50 of 50 pins) |
| Contact Resistance<br><i>IEC 60512-2-1</i>    | $\leq 25$ m $\Omega$                                          |
| Clearance and Creepage                        | min. 0.4 mm                                                   |
| Insulation Resistance<br><i>IEC 60512-3-1</i> | $\geq 10$ G $\Omega$                                          |
| Test Voltage<br><i>IEC 60512-4-1</i>          | 500 VAC                                                       |

# Product Data Sheet

One27 Female high-profile,  
Part No. 404-54012-51



## Technical Specifications

### Processing

Soldering Temperature 20 - 40 s at 260°C  
*JEDEC J-STD-020E*

MSL 1  
*JEDEC J-STD-020E*

Assembly Pick and Place

### Approval / Compliance

UL file E130314

Environment RoHS compliant

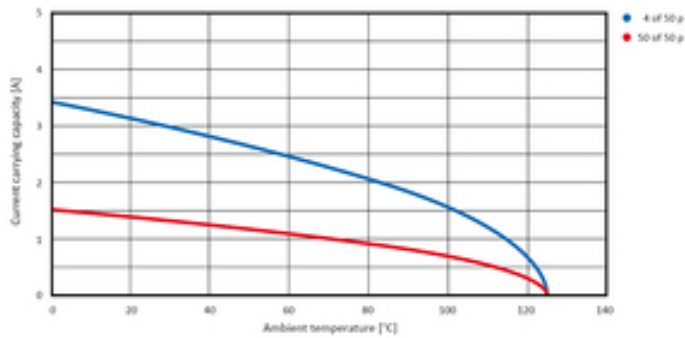
# Product Data Sheet

One27 Female high-profile,  
Part No. 404-54012-51



## Derating Diagram

Current carrying capacity One27  
max. 3.1A at 20°C (4 of 50 pin)  
max. 1.4A at 20°C (50 of 50 pin)



# Product Data Sheet

One27 Female high-profile,  
Part No. 404-54012-51

---



## Modifications

Available on request

- different number of pins
- other performance level

## Drawings

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

[» PDF](#)

[» 3D IGES](#)

[» 3D STEP](#)

[» 3D PDF](#)