



**As an alternative to gold versions, Milli-Grid™ tin-plated connectors support significant cost savings in high-circuit signal applications across a variety of industries**

## Features and Benefits

Headers feature durable 0.50mm-square bandolier-pin solder tails and a center polarizing slot

For robust PCB hold-down and prevention of mis-mating respectively

Headers support peak soldering temperatures of up to 260°C

Assembly-processing friendly

Receptacle terminals feature high mating and contact forces

Assures electrical performance at any low current level

High mating and contact forces of receptacles

Ensure mechanical stability of contact interface and high electrical reliability

Wide range of connector circuit sizes customizable from 10 to 50 circuits

Give application developers greater design flexibility

Glass-filled LCP receptacle housings rated halogen-free and glow-wire compliant

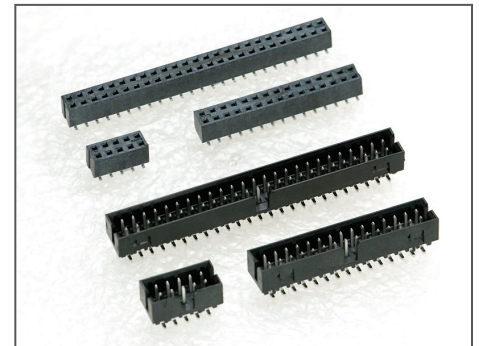
Meet environmental and safety objectives

## Milli-Grid™ Connectors, Tin-plated

Dual-row, Vertical, SMT Connectors with Peg

**78788** Receptacles

**87832** Headers



Tin-plated Milli-Grid™ Headers and Receptacles

## Applications

### Data / Computing

- High-end Computing
- Office Automation Equipment

### Telecommunications / Networking

- Hubs
- Routers
- Servers

### Aerospace

- Unmanned Vehicles
- Aircraft Management Systems
- Aircraft Avionics



Office Automation Equipment



Aircraft Avionics and Management Systems



High-end Computing



## Milli-Grid™ Connectors, Tin-plated

### Specifications – PCB Headers

#### Reference Information

Packaging: Refer to table below

UL File No.: E29179

CSA File No.: LR19980

Mates With: Refer to table below

Terminal Used:

Designed In Millimeters

RoHS: Yes

Halogen Free: No

Glow Wire Compliant: No

#### Electrical

Voltage (max.): 125V

Current (max.): 2.00A

Dielectric Withstanding Voltage:

1000V RMS

Insulation Resistance: 1000 Megohms

#### Mechanical

Terminal Retention Force to Housing (min.):

850g per pin before soldering

#### Physical

Housing and Cap: 30% Glass-filled

Nylon 46, UL94V-0, Color, Black

Contact:

0.50mm square Phosphor Bronze

Plating:

Contact and Solder Tail Area —

2.50µm (100µ") Tin (Sn)

Underplating — Nickel (Ni) overall

Operating Temperature: -55 to +105°C

### Ordering Information – PCB Headers

Part No.	Circuits	Packaging	Mates With	With Cap
<a href="#">87832-1072</a>	10	Tube	<a href="#">78788-1011</a> , <a href="#">78788-1012</a> , <a href="#">78788-1013</a> , <a href="#">78788-1014</a>	Yes
<a href="#">87832-2072</a>	20	Tube	<a href="#">78788-2011</a>	
<a href="#">87832-3072</a>	30	Tube	<a href="#">78788-3011</a>	
<a href="#">87832-4072</a>	40	Tube	<a href="#">78788-4011</a>	
<a href="#">87832-5072</a>	50	Tube	<a href="#">78788-5011</a> , <a href="#">78788-5012</a> , <a href="#">78788-5013</a> , <a href="#">78788-5014</a>	
<a href="#">87832-5472</a>	10	Tape and Reel	<a href="#">78788-1011</a> , <a href="#">78788-1012</a> , <a href="#">78788-1013</a> , <a href="#">78788-1014</a>	
<a href="#">87832-5972</a>	20	Tape and Reel	<a href="#">78788-2011</a>	
<a href="#">87832-6472</a>	30	Tape and Reel	<a href="#">78788-3011</a>	
<a href="#">87832-6972</a>	40	Tape and Reel	<a href="#">78788-4011</a>	
<a href="#">87832-7472</a>	50	Tape and Reel	<a href="#">78788-5011</a> , <a href="#">78788-5012</a> , <a href="#">78788-5013</a> , <a href="#">78788-5014</a>	

### Specifications – PCB Receptacles

#### Reference Information

Packaging: Refer to table below  
 UL File No.: TBA  
 CSA File No.: TBA  
 Mates With: Refer to table below  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free: Yes  
 Glow Wire Compliant: Yes

#### Electrical

Voltage (max.): 125V DC/AC (RMS)  
 Current (max.): 1.0A DC/AC (RMS)  
 Low Level Contact Resistance (max.):  
 15 milliohms  
 Dielectric Withstanding Voltage:  
 500V AC  
 Insulation Resistance:  
 1000 Megohm (initial)

#### Mechanical

Terminal Retention Force (min.): 2.22N  
 Mating Force (max.):  
 124.5N (10-20 circuits);  
 148.1N (22-30 circuits);  
 174.6N (32-40 circuits);  
 213.8N (42-50 circuits)  
 Unmating Force:  
 13.7N (10-18 circuits);  
 27.5N (20-28 circuits);  
 41.2N (30-38 circuits);  
 54.9N (40-50 circuits)  
 Durability (min.): 30 cycles

#### Physical

Housing:  
 LCP, Glass-filled, UL94V-0, Black  
 Cap: Nylon, Glass-filled, Black  
 Contact: Copper Alloy  
 Plating:  
 Contact and Solder-tail Area —  
 2.50µm (100µ") Tin (Sn)  
 Underplating —  
 Nickel (Ni)  
 Operating Temperature: 0 to +105°C

### Ordering Information – PCB Receptacles

Part No.	Circuits	With Cap	Packaging	Mates With
<a href="#">78788-1011</a>	10	Yes	Tape and Reel	<a href="#">87832-1072</a> , <a href="#">87832-5472</a>
<a href="#">78788-1012</a>	10	No	Tape and Reel	
<a href="#">78788-1013</a>	10	Yes	Tube	
<a href="#">78788-1014</a>	10	No	Tube	
<a href="#">78788-2011</a>	20	Yes	Tape and Reel	<a href="#">87832-2072</a> , <a href="#">87832-5972</a>
<a href="#">78788-3011</a>	30	Yes	Tape and Reel	<a href="#">87832-3072</a> , <a href="#">87832-6472</a>
<a href="#">78788-4011</a>	40	Yes	Tape and Reel	<a href="#">87832-4072</a> , <a href="#">87832-6972</a>
<a href="#">78788-5011</a>	50	Yes	Tape and Reel	<a href="#">87832-5072</a> , <a href="#">87832-7472</a>
<a href="#">78788-5012</a>	50	No	Tape and Reel	
<a href="#">78788-5013</a>	50	No	Tube	
<a href="#">78788-5014</a>	50	No	Tube	