



## 2.54mm (.100") Pitch KK® Low Profile PC Board Receptacle

### 44812

### Top and Bottom Entry



#### Low Profile KK® Receptacle Combines Top and Bottom Header Entry in One Connector

The new 44812 series Low Profile PC Board Connector is a significant step forward in updating the KK product line to reflect customer's needs in the 21st century. Utilizing terminal design features from the SPOX™ family, Molex has been able to improve performance while shrinking the overall package. The new design functions as both a top and bottom entry version, and retrofits into existing KK .100" Pitch bottom entry PCB layouts. Overall connector height has been reduced by almost 50%! The housing is made out of high temperature nylon for surface mount compatibility. The new design also permits higher current ratings and a higher operating temperature.

#### Features and Benefits

- 5.0A per line increases current carrying capacity
- Compact 4.5mm height above PC board allows closer board stacking and is nearly half the height of existing receptacles
- Improved terminal design permits higher operating temperatures, up to +105°C
- Top and bottom entry mating provides versatile design feature in one cost-conscious style
- Connector can be retrofitted into existing PC board layouts which ensures convenient transition with various mating headers
- Surface-mount compatible housing eliminates potential processing issues

#### SPECIFICATIONS

##### Reference Information

Packaging: Tray  
 UL File No.: E29179  
 CSA File No.: LR 19980  
 Mates With: 4030, 4094, 42225, 42226, 42227,  
 42228, 42152, 42153, 42375, 42376, 42377,  
 42624  
 Designed In: Inches

##### Mechanical

Contact Insertion Force: N/A  
 Contact Retention to Housing: 15.6N min.  
 Insertion Force to PCB: Varies  
 Mating Force: 7.6N per contact max.  
 Unmating Force: 2.7N per contact min.  
 Durability: 25 cycles

##### Physical

Housing: Glass Filled 4/6 nylon  
 Contact: Copper Alloy  
 Plating: Contact Area – Tin or Gold  
 Solder Tail Area --Tin  
 Underplating -- Nickel  
 PCB Thickness: 0.062"  
 Operating Temperature: +105°C

##### Electrical

Voltage: 250 Volts AC (RMS)  
 176 Volts DC  
 Current: 5 Amperes  
 Contact Resistance: 30mΩ max. initial  
 10mΩ max. increase over initial  
 Dielectric Withstanding Voltage: 1,000V  
 Insulation Resistance: 1,000MΩ

## APPLICATIONS

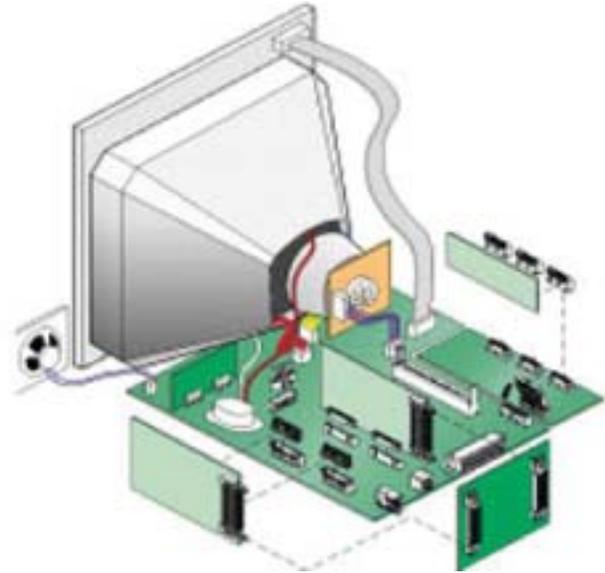
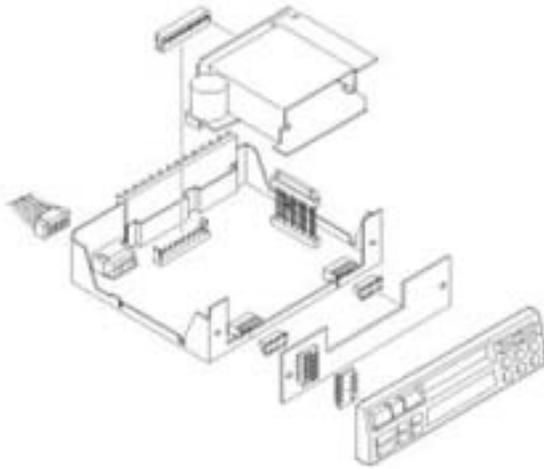
- HVAC
- Automotive components
  - Radios
  - HVAC
  - Controls
- Medical equipment
- Home entertainment
- Home security
- Servers, PCs, routers, hubs
- Distribution – only one part to stock for two functions, providing reduced carrying costs
- Can be used virtually anywhere two boards need to be connected together



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## 44812

### Top and Bottom Entry



Tin Order No.	15µ" Gold Order No.	30µ" Gold Order No.	Circuit
44812-0002	44812-0020	44812-0040	2
44812-0003	44812-0021	44812-0041	3
44812-0004	44812-0022	44812-0042	4
44812-0005	44812-0023	44812-0043	5
44812-0006	44812-0024	44812-0044	6
44812-0007	44812-0025	44812-0045	7
44812-0008	44812-0026	44812-0046	8
44812-0009	44812-0027	44812-0047	9
44812-0010	44812-0028	44812-0048	10
44812-0011	44812-0029	44812-0049	11
44812-0012	44812-0030	44812-0050	12
44812-0013	44812-0031	44812-0051	13
44812-0014	44812-0032	44812-0052	14
44812-0015	44812-0033	44812-0053	15
44812-0016	44812-0034	44812-0054	16

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