# Low 高線"从812=0004"供品感了op 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<sup>™</sup> 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 recptacles
- 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

**molex**<sup>®</sup> 2.54mm (.100") Pitch KK<sup>®</sup> Low Profile PC Board Receptacle

# 44812

# **Top and Bottom Entry**



### **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** 

#### Electrical

Voltage: 250 Volts AC (RMS) 176 Volts DC **Current: 5 Amperes** Contact Resistance:  $30m\Omega$  max. initial  $10m\Omega$  max. increase over initial **Dielectric Withstanding Voltage: 1,000V** Insulation Resistance:  $1.000M\Omega$ 

### 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



### **APPLICATIONS**

# ■ HV產询"44812-0004"供应商

- Automotive components
  - Radios
  - HVAC
  - Controls
- Medical equipment
- Home entertainment

Home security

Servers, PCs, routers, hubs

be connected together

■ Distribution – only one part to stock for two

functions, providing reduced carrying costs

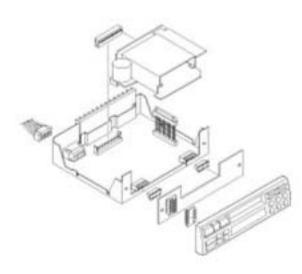
Can be used virtually anywhere two boards need to

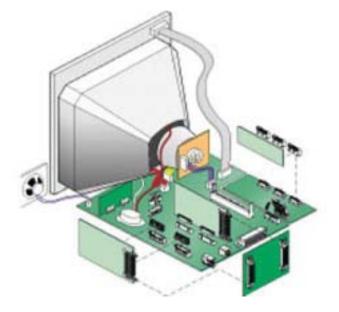


**molex**<sup>®</sup> 2.54mm (.100") Pitch KK<sup>®</sup> Low Profile PC Board **Receptacle** 

# 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

**Americas Headquarters** 

Lisle, Illinois 60532 U.S.A. 1-800-78MOLEX amerinfo@molex.com

Far East North Headquarters Yamato, Kanagawa, Japan 81-462-65-2324 feninfo@molex.com

#### Far East South Headquarters

Jurong, Singapore 65-6-268-6868 fesinfo@molex.com **European Headquarters** Munich, Germany 49-89-413092-0 eurinfo@molex.com

## **Corporate Headquarters**

2222 Wellington Ct. Lisle, IL 60532 U.S.A. 630-969-4550 Fax:630-969-1352

Visit our Web site at www.molex.com

Printed in USA/JI/2004.01