#### FEATURES AND SPECIFICATIONS



#### Molex's New Mini-PCI Compliant Inverted Modular Jack Offers Signal Reliability and Flexibility

Molex Incorporated introduces a new right angle inverted Modular Jack that mounts to a 1.00mm (.039") thick PCB in conformance with the Mini-PCI standard. Typical applications for this modular jack are notebook computers, modems, LANs, docking stations, NetPCs, and set top boxes where space is limited.

The inverted design places the terminals on the bottom of the jack providing a shorter signal path for reduced crosstalk. This design also minimizes the "Antennae" effect resulting in less noise being radiated through transmission lines. The Mini-PCI compliant jack is offered with a lightpipe option. Lightpipes replace standard LEDs used in other manufacturers' modular jacks. The lightpipes direct the light emitted from the LEDs mounted on the PCB rather than conventional LEDs mounted in the modular jacks. This offers the ultimate in flexibility since any color or intensity SMT LED can be used. The combination of PCB mounted LEDs and lightpipes results in a reduction of LED generated noise.

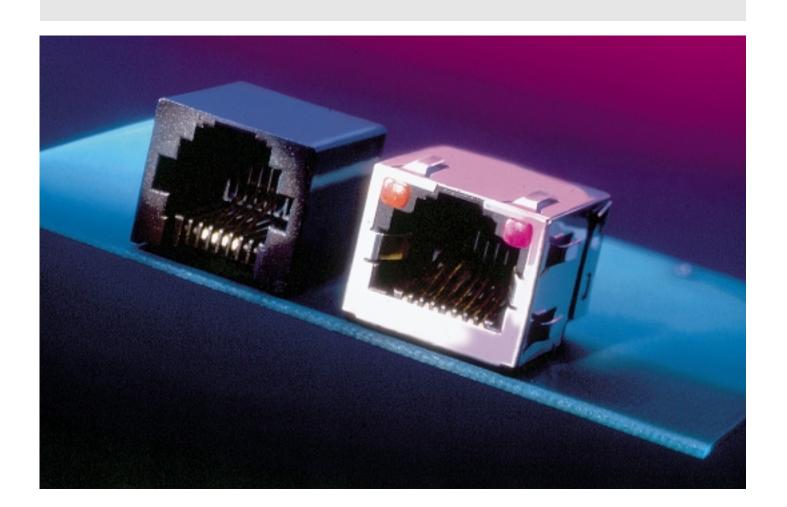
The inverted Mini-PCI compliant modular jacks are available in through-hole styles for wave soldering or a high temperature version for reflow soldering. The high temperature version maintains performance at a +260°C reflow soldering temperature for 1 minute without deforming the modular jack or lightpipe. Shielded and unshielded offerings are available for both RJ-11 and RJ-45 configurations for the standard through hole version, and a shielded modular jack is offered with the high temperature lightpipes.

#### Features and Benefits

- Meets the 1.00mm (.039") thick PCB requirements of the Mini-PCI standard allowing for thinner PCB for tight space applications
- Plug latch on top of jack provides easy thumb depression for mating and unmating
- The inverted RJ-45 lightpipe modular jack provides Category 5 performance for Fast Ethernet applications
- Signal integrity remains high due to no interference from LED leads
- Lightpipes reduce the electronic noise from LEDs by as much as 50%
- Meets FCC 68.5 specification when plating selection is 50μ" of Gold. (30μ" and 15μ" of Gold plating are also available)
- Each Molex modular jack is 100% electronically tested to detect possible shorting conditions before the product is shipped

## 44380

Right Angle, Low Profile Inverted Mini-PCI Compliant



#### FEATURES AND SPECIFICATIONS

#### **Features and Benefits**

- RJ-45 version meets Category 5 for Fast Ethernet
- Meets 1.00mm (.039") max. PCB requirements
- Plug latch on top
- Shortened leads with bottom contacts
- Lower electrical noise than LED offerings
- 34% fewer leads than LED offerings
- Surface Mount Compatible

#### Reference Information

Product Specification: PS-44380-0003 Packaging: Unshielded—Tube Shielded—Tray

UL File No.: E107635 CSA File No.: LR19980 Mates With: FCC 68 Plugs Designed In: Inches

#### Electrical

Voltage: 125V Current: 1.5A max.

Contact Resistance:  $10m\Omega$  max. Dielectric Withstanding Voltage: 1000V AC Insulation Resistance: 500 M $\Omega$  min.

## Mechanical

Durability: 500 Cycles

#### **Physical**

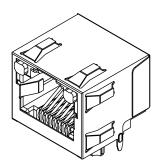
Housing: Black glass-filled high temperature Nylon, UL 94V-0 Plating: Contact Area—1.27µm (50µ") min. Gold Solder Tails—1.27µm (50µ") Tin/Lead on both contact area and solder tails Underplating—Nickel

Operating Temperature: -40 to +80°C



## 44380

# Right Angle, Low Profile Inverted Mini-PCI Compliant



1.02 .040 TYP

3.56 AVAIL SPACE

FOR LED CHIPS

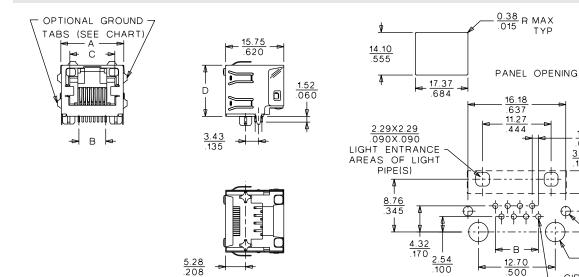
1.57 DIA .062 (2) PL

(2) PL

CIRCUIT

PCB LAYOUT : COMPONENT SIDE 1.00 RECOMMENDED PCB THICKNESS: 0.039

### **CATALOG DRAWING (FOR REFERENCE ONLY)**



#### **ORDERING INFORMATION AND DIMENSIONS**

Circuits	Loaded Contacts	Lightpipes	Order No.			Dimension			
			Unshielded	Shielded					
				With All Panel Grounding Tabs	With Offset Panel Grounding Tabs	Α	В	С	D
6	4		44380-0003			15.75 (.620)	3.07 (.120)	9.88 (.389)	13.21 (.520)
6	4			44380-0006		16.38 (.645)	3.07 (.120)	9.88 (.389)	13.53 (.533)
6	4				44380-0015	16.38 (.645)	3.07 (.120)	9.88 (.389)	13.53 (.533)
8	8	Yes		44380-1010		16.38 (.645)	7.11 (.280)	11.91 (.469)	13.53 (.533)
8	8	Yes			44380-1016	16.38 (.645)	7.11 (.280)	11.91 (.469)	13.53 (.533)

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