

# RoHS-Compliant Small Form Factor Pluggable Press-Fit PCI Compliant SFP Cage

PL-KP2-00-000-26



#### **Key Features**

- Compatible with all MSA-compliant SFP transceivers
- Enhanced EMI performance at data rates up to and above 4Gbps
- PCI compliant
- RoHS compliant and lead-free

## **Applications**

- Switch and hub devices
- Mass storage systems interconnect
- Host adapter cards
- Enterprise switch interconnects

This unique lead-free and RoHS-Compliant, pluggable, press-fit cage represents one of JDSU's complementary products to the Small Form Factor Pluggable (SFP) transceivers. The patented design enables enhanced EMI performance using improved shielding between the cage and bezel. Optimized for use with all transceiver products complying with the SFP multi-source agreement (MSA), the cage design allows for low-cost implementation using standard manufacturing processes. The hardened spring-tempered material, with excellent material memory characteristics, further provide for consistent transceiver mate/de-mate performance that provides for port flexibility over the life of the system.

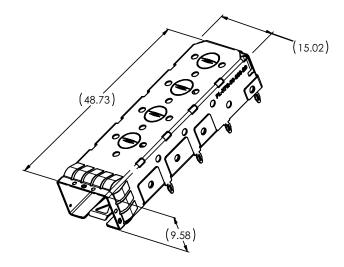
### **Highlights**

- Industry's most robust and sturdy cage design optimized for SFP applications, including Fibre Channel, Gigabit Ethernet, and SONET
- Enhanced EMI performance due to improved mechanical shielding
- Supports all industry SFP transceivers, using MSA compliant board layouts and hole sizes.
- Extensive compatibility testing with industry-wide MSA-based modules for interoperability in multiple vendor implementations
- Backward compatible design offers superior mechanical stability, simplifying implementation in customer PCBs
- Tested for common applications and standard industry processes to allow seamless integration into manufacturing without additional equipment or requirements
- Excellent material memory characteristics provide for high cage retention to PCB, reducing field failures due to cage pull up

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#### **Features**

- RoHS compliant and lead-free
- Superior EMI performance at 4Gbps
- Press-fit attachment
- Proven SFP MSA compliant transceiver cage
- Supports MSA compliant board layout and hole sizes
- · PCI compliant
- Supports multiple system configurations
- Robust manufacturing process
- Sturdy construction
- Hardened spring tempered alloy
- · Simple assembly
- Utilizes common manufacturing equipment and processes
- 360 degree EMI contact fingers
- Low emission design
- FCC Class B compliant



The PL-KP2-00-000-26 press-fit cage accommodates all MSA-compliant SFP transceivers. The excellent material memory characteristics provide high cage retention to the PCB, resulting in fewer field failures.

# Section 1 Functional Description

The press Fit Cage is designed for compatibility with the Small Form Factor Pluggable (SFP) Transceiver Multisource Agreement (MSA). See Figure 1.

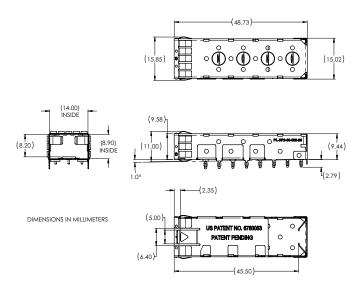


Figure 1 Standard press-fit cage mechanical drawing (PL-KP2-00-000-26)

# Section 2 Installation Guide

This cage is designed to be pressed into a PCB. The required insertion force in a typical application is about 90 lbs total (each of the 12 press fit pins require an approximate force of 7.5lbs/pin). The insertion force depends on the hole diameter and plating material so individual results will vary. For best installation, a solid piece of stainless steel or similar metal should be placed flat across the top surface of the cage. The fixture should not flatten the EMI springs at the front of the cage.

Care should be taken not to twist or tilt the cage during the installation process. Excessive force will result in damage to the unit. A press machine similar to the MEP-6T/12T manufactured by Automated Services Group, West Palm Beach, FL would be fine for cage installation.

Cage removal is very easy. Simply insert a flat metal bar or similar object into the cage assembly and lift it up off the PCB. It takes approximately 27 lbs to remove a cage from a PCB. The actual extraction force will vary based on the hole diameter and plating material.

Note: Cages are not designed to be re-installed once they are removed from a board.

# Section 3 Recommended OEM PCB Layouts

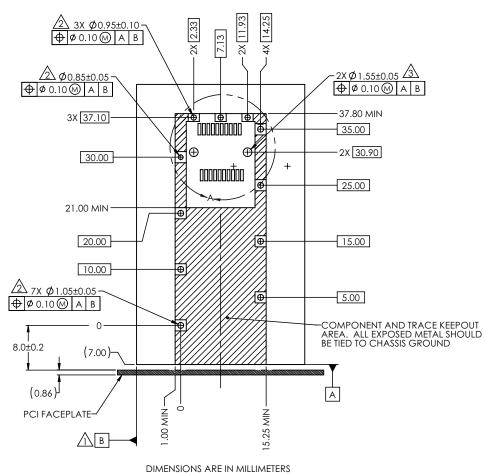
#### NOTES:

DATUM B TO BE ESTABLISHED BY CUSTOMER

NOTED PADS AND VIAS ARE PLATED AND TIED TO CHASSIS GROUND. DIMENSIONS APPLY AFTER PLATING.

NOTED THRU HOLES ARE UNPLATED.

ELECTRICAL CONNECTOR SOLDER PAD LAYOUT PER SFP MSA.



DIMENSIONS ARE IN MILLIMETERS

Figure 2 PCB layout

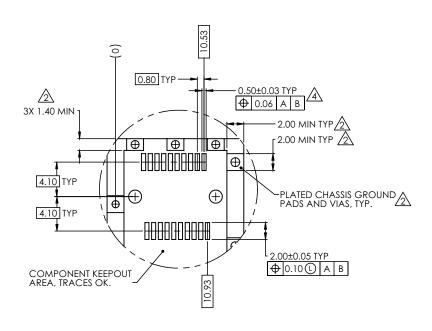


Figure 3 PCB detail layout

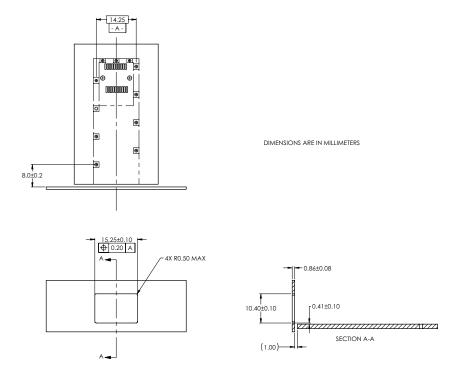


Figure 4 PCB to Bezel layout



# Section 4 Package and Handling Instructions

The PL-KP2-00-000-26 cages are packaged in card board boxes. Each box has 10 layers of 35 cages in plastic trays. There are 350 cages per box.

# **Flammability**

The PL-KP2-00-000-26 cages are made from Alloy C77000 nickel-silver sheet metal with a nickel-plated BeCu EMI collar welded on.

## **RoHS Compliance**

Compliant per the Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Order Information	

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

## Sample: PL-KP2-00-000-26

Part Number	Description
PL-KP2-00-000-26	RoHS-compliant, EMI-enhanced for 4G and higher data rates, PCI compliant, Press-Fit SFP Cage for standard applications