



Part Number : [22288121](#)

Product Description : KK 254 Breakaway Header, Right-Angle Surface Mount Compatible, 12 Circuits, Tin (Sn) Plating, Mating Pin Length 8.23mm, Bag

Series Number : 42377

Status : Active

Product Category : PCB Headers and Receptacles

Engineering Part Number : 42377-0047



Documents and Resources

Drawings

[022288121_sd.pdf](#)

[PK-40873-0041-001.pdf](#)

3D Models and Design Files

[STEP AP242](#)

[SOLIDWORKS](#)

[Creo](#)

[Symbol and Footprint \(Multi-Format\)](#)


[SYM-22-28-8121-001.zip](#)

Specifications

[PS-10-07-001.pdf](#)

Product Environment Compliance

Compliance

| | |
|--------------------|---|
| GADSL/IMDS | Compliant with Exemption 44; 33 |
| China RoHS |  per SJ/T 11365-2006 |
| EU ELV | Not Relevant |
| Low-Halogen Status | Not Low-Halogen per IEC 61249-2-21 |
| REACH SVHC | Not Contained per D(2025)7771-DC (04 Feb 2026) |
| EU RoHS | Compliant per EU 2015/863 |

Compliance Statements

- EU RoHS
- REACH SVHC
- Low-Halogen

Industry Documents

- IPC 1752A Class C
- IPC 1752A Class D
- Molex Product Compliance Declaration
- IEC-62474
- chemSHERPA (xml)

Substances of Interest

- PFAS

EU RoHS Certificate of Compliance

Additional Product Compliance Information

Part Details

General

| | |
|----------------|---|
| Status | Active |
| Category | PCB Headers and Receptacles |
| Series | 42377 |
| Description | KK 254 Breakaway Header, Right-Angle Surface Mount Compatible, 12 Circuits, Tin (Sn) Plating, Mating Pin Length 8.23mm, Bag |
| Application | Board-to-Board, Wire-to-Board |
| Component Type | PCB Header |
| Product Name | KK 254 |
| UPC | 800753814370 |

Agency

| | |
|-----|---------|
| CSA | LR19980 |
| UL | E29179 |

Electrical

| | |
|-------------------------------|------|
| Current - Maximum per Contact | 4.0A |
| Voltage - Maximum | 500V |

Physical

| | |
|--------------------------------|--------------------------------|
| Breakaway | Yes |
| Circuits (Loaded) | 12 |
| Circuits (maximum) | 12 |
| Color - Resin | Black |
| Durability (mating cycles max) | 25 |
| First Mate / Last Break | No |
| Flammability | 94V-0 |
| Gender | Male |
| Glow-Wire Capable | No |
| Guide to Mating Part | No |
| Keying to Mating Part | No |
| Lock to Mating Part | No |
| Material - Metal | Brass |
| Material - Plating Mating | Tin |
| Material - Plating Termination | Tin |
| Material - Resin | High Temperature Thermoplastic |
| Mounting Style | Through Hole |
| Net Weight | 0.924/g |
| Number of Rows | 1 |
| Orientation | Right Angle |
| Packaging Type | Bag |
| PCB Locator | No |
| PCB Retention | No |
| PCB Thickness - Recommended | 1.60mm |
| PC Tail Length | 3.05mm |
| Pitch - Mating Interface | 2.54mm |
| Pitch - Termination Interface | 2.54mm |
| Plating min - Mating | 2.540µm |
| Plating min - Termination | 2.540µm |
| Polarized to Mating Part | Yes |
| Polarized to PCB | No |
| Shrouded | Unshrouded |
| Stackable | No |
| Temperature Range - Operating | -40° to +80°C |

| | |
|-----------------------------|--------------|
| Termination Interface Style | Through Hole |
|-----------------------------|--------------|

Solder Process Data

| | |
|------------------------------|------|
| Max-Duration | 5 |
| Lead-Free Process Capability | WAVE |
| Max-Cycle | 1 |
| Max-Temp | 235 |

Mates With / Use With

Mates with Part(s)

| Description | Part Number |
|---|-------------|
| KK 254 Single Row Crimp Housings | <u>2695</u> |
| KK 254 Receptacle Housings | <u>7880</u> |
| KK 254 PC Board Connector | <u>4455</u> |
| 2.54mm Pitch C-Grid Shunt Terminal Housings | <u>7859</u> |

Application Tooling

This document was generated on May 19, 2026