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Part Number: [0459705115](#)
Status: **Active**
Overview: SEARAY* Plugs, Receptacles and Copper Flex Assemblies
Description: SEARAY* Plug, 500 Circuits, 2.00mm Unmated Height, 10 Rows, with Pegs, Solder Charge™ Lead-Free

Documents:

| | |
|---|--|
| 3D Model | Product Specification TS-45970-002-001 (PDF) |
| Drawing (PDF) | Application Specification AS-45970-002-001 (PDF) |
| Product Specification PS-45970-001-001 (PDF) | Application Specification AS-45970-990-001 (PDF) |
| Product Specification PS-45970-002-001 (PDF) | Packaging Specification PK-45970-001 (PDF) |
| Product Specification TS-45970-0007-001 (PDF) | Packaging Specification PK-45970-002 (PDF) |
| Product Specification TS-45970-001-001 (PDF) | RoHS Certificate of Compliance (PDF) |

Agency Certification

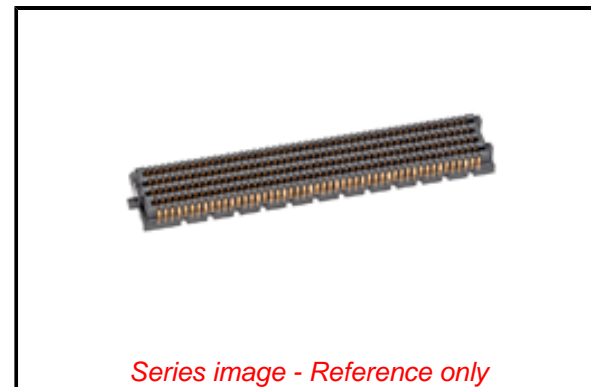
| | |
|-----|---------|
| CSA | LR19980 |
| UL | E29179 |

General

| | |
|------------------|---|
| Product Family | PCB Headers |
| Series | 45970 |
| Application | Board-to-Board, Signal |
| Electrical Model | Yes |
| Overview | SEARAY* Plugs, Receptacles and Copper Flex Assemblies |
| Product Name | SEARAY* |
| UPC | 883906607982 |

Physical

| | |
|--------------------------------|--------------------------------|
| Breakaway | No |
| Circuits (Loaded) | 500 |
| Circuits (maximum) | 500 |
| Color - Resin | Black |
| Durability (mating cycles max) | 100 |
| First Mate / Last Break | No |
| Flammability | 94V-0 |
| Glow-Wire Compliant | No |
| Guide to Mating Part | Yes |
| Keying to Mating Part | Yes |
| Lock to Mating Part | None |
| Material - Metal | Copper Alloy |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Material - Resin | High Temperature Thermoplastic |
| Net Weight | 6.324/g |
| Number of Rows | 10 |
| Orientation | Vertical |
| PCB Locator | Yes |
| PCB Retention | Yes |
| PCB Thickness - Recommended | 1.60mm |
| Packaging Type | Embossed Tape on Reel |
| Pitch - Mating Interface | 1.27mm |
| Pitch - Termination Interface | 1.27mm |
| Plating min - Mating | 0.762µm |
| Plating min - Termination | 2.540µm |
| Polarized to Mating Part | Yes |
| Polarized to PCB | Yes |



Series image - Reference only

EU ELV

Not Relevant

EU RoHS

Compliant

REACH SVHC

Not Contained Per -
ED/30/2017 (7 July
2017)

Halogen-Free

Status

Low-Halogen

Need more information on product environmental compliance?

Email productcompliance@molex.com
Please visit the [Contact Us](#) section for any non-product compliance questions.

| | |
|-----------------|---------------|
| China ROHS | Green Image |
| ELV | Not Relevant |
| RoHS Phthalates | Not Contained |

Search Parts in this Series

[45970](#) Series

Mates With

[45971](#) SEARAY* Receptacle

| | |
|--------------------------------|--------------------|
| Robotic Placement | Pick and Place Cap |
| Shrouded | No |
| Stackable | No |
| Surface Mount Compatible (SMC) | Yes |
| Temperature Range - Operating | -55°C to +125°C |
| Termination Interface: Style | Surface Mount |
| Unmated Height | 2.00mm |

Electrical

| | |
|-------------------------------|---------|
| Current - Maximum per Contact | 2.7A |
| Voltage - Maximum | 240V AC |

Solder Process Data

| | |
|--|--------|
| Duration at Max. Process Temperature (seconds) | 003 |
| Lead-free Process Capability | REFLOW |
| Max. Cycles at Max. Process Temperature | 001 |
| Process Temperature max. C | 260 |

Material Info**Reference - Drawing Numbers**

| | |
|---------------------------|---|
| Application Specification | AS-45970-002-001, AS-45970-990-001 |
| Electrical Model Document | EE-45970-007, EE-45970-010, EE-45970-015, EE-46556-0085 |
| Packaging Specification | PK-45970-001, PK-45970-002 |
| Product Specification | PS-45970-001-001, PS-45970-002-001, TS-45970-0007-001, TS-45970-001-001, TS-45970-002-001 |
| S-Parameter Model | SP-45970-007, SP-45970-010, SP-45970-015 |
| Sales Drawing | SD-45970-001-001 |
| Symbol/Footprint Data | SYM-45970-5115 |

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