



Part Number : [459709115](#)

Series Number : 45970

Product Category : Board-to-Board Connectors

Product Description : 1.27mm Pitch, SEARAY Plug, 450 Circuits, 2.00mm Unmated Height, 10 Rows, with Pegs, Solder Charge Lead-Free

Status : Active

Documents & Resources

- Drawings**
- [Drawing 459709115_sd.pdf](#)
 - [Packaging Design Drawing PK-45970-002-001.pdf](#)
- 3D Models and Design Files**
- [3D Model 459709115_stp.zip](#)
 - [Electrical Model Document EE-45970-007-007.pdf](#)
 - [Electrical Model Document EE-45970-010-010.pdf](#)
 - [Electrical Model Document EE-45970-015-015.pdf](#)
 - [Electrical Model Document EE-46556-0085-001.pdf](#)
 - [S-Parameter Model SP-45970-007-001.zip](#)
 - [S-Parameter Model SP-45970-010-010.zip](#)
 - [S-Parameter Model SP-45970-015-015.zip](#)
 - [Symbol Footprint Data SYM-45970-9115-001.zip](#)

- Specifications**
- [Application Specification AS-45970-002-001.pdf](#)
 - [Application Specification AS-45970-990-001.pdf](#)
 - [Product Specification PS-45970-001-001.pdf](#)
 - [Product Specification PS-45970-002-001.pdf](#)
 - [Product Specification TS-45970-001-001.pdf](#)
 - [Test Summary TS-45970-0007-001.pdf](#)
 - [Test Summary TS-45970-002-001.pdf](#)

Product Environment Compliance

Compliance

GADSL/IMDS	Not Relevant
China RoHS	
EU ELV	Not Relevant
Low-Halogen Status	Low-Halogen per IEC 61249-2-21

REACH SVHC	Not Contained per D(2024)4144-DC (27 June 2024)
EU RoHS	Compliant per EU 2015/863

Multiple Part Product Compliance Statements

- Eu RoHS
- REACH SVHC
- Low-Halogen

Multiple Part Industry Compliance Documents

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

EU RoHS Certificate of Compliance

Part Details

General

Status	Active
Category	Board-to-Board Connectors
Series	45970
Description	1.27mm Pitch, SEARAY Plug, 450 Circuits, 2.00mm Unmated Height, 10 Rows, with Pegs, Solder Charge Lead-Free
Application	Board-to-Board, Signal
Component Type	PCB Header
Product Family	SEARAY and SEARAY Slim Mezzanine Family
Product Name	SEARAY
UPC	883906610227

Agency

CSA	LR19980
UL	E29179

Electrical

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

Breakaway	No
Circuits (Loaded)	450
Circuits (maximum)	450
Color - Resin	Black
Durability (mating cycles max)	100
First Mate / Last Break	No
Flammability	94V-0
Glow-Wire Capable	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	5.725/g
Number of Rows	10
Orientation	Vertical
Packaging Type	Embossed Tape on Reel
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness - Recommended	1.60mm
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
Robotic Placement	Pick and Place Cap
Shrouded	No
Stackable	No
Temperature Range - Operating	-55° to +125°C

Termination Interface Style	Surface Mount
Unmated Height	2.00mm

Solder Process Data

Max-Duration	3
Lead-Free Process Capability	REFLOW
Max-Cycle	1
Max-Temp	260

Mates With / Use With

Mates with Part(s)

Description	Part Number
1.27mm Pitch, SEARAY Receptacles	<u>45971</u>