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**Part Number:** [0459704185](#)  
**Status:** **Active**  
**Overview:** SEARAY\* Plugs, Receptacles and Copper Flex Assemblies  
**Description:** SEARAY\* Plug, 320 Circuits, 2.00mm Unmated Height, 8 Rows, with Pegs, Solder Charge™ Lead-Free

**Documents:**

<a href="#">3D Model</a>	<a href="#">Packaging Specification PK-45970-001 (PDF)</a>
<a href="#">Drawing (PDF)</a>	<a href="#">Packaging Specification PK-45970-002 (PDF)</a>
<a href="#">Product Specification PS-45970-001 (PDF)</a>	<a href="#">Test Summary TS-45970-0007 (PDF)</a>
<a href="#">Product Specification PS-45970-002 (PDF)</a>	<a href="#">Test Summary TS-45970-001 (PDF)</a>
<a href="#">Application Specification AS-45970-002 (PDF)</a>	<a href="#">Test Summary TS-45970-002 (PDF)</a>
<a href="#">Application Specification AS-45970-990 (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>

**Agency Certification**

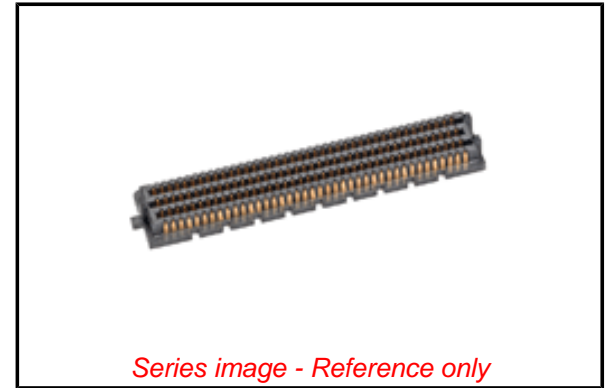
CSA	LR19980
UL	E29179

**General**

Product Family	PCB Headers
Series	<a href="#">45970</a>
Application	Board-to-Board, Signal
Electrical Model	Yes
Overview	<a href="#">SEARAY* Plugs, Receptacles and Copper Flex Assemblies</a>
Product Name	SEARAY*
UPC	883906607500

**Physical**

Breakaway	No
Circuits (Loaded)	320
Circuits (maximum)	320
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	4.130/g
Number of Rows	8
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



**EU ELV**

**Not Relevant**

**EU RoHS**

**Compliant**

**REACH SVHC**

Not Contained Per -  
ED/21/2016 (20 June  
2016)

**Halogen-Free**

**Status**

**Low-Halogen**

**Need more information on product environmental compliance?**

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

China ROHS

ELV

Green Image

Not Relevant

**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, AS-45970-990
Electrical Model Document	EE-45970-007, EE-45970-010, EE-45970-015
Packaging Specification	PK-45970-001, PK-45970-002
Product Specification	PS-45970-001, PS-45970-002
S-Parameter Model	SP-45970-007, SP-45970-010, SP-45970-015
Sales Drawing	SD-45970-001
Symbol/Footprint Data	SYM-45970-4185
Test Summary	TS-45970-0007, TS-45970-001, TS-45970-002

\*SEARAY is a trademark of Samtec, Inc.

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