



BTH-090-01-F-D-A



**BTH SERIES**

**(0.50 mm) .0197"**

# BASIC BLADE & BEAM HEADER

## SPECIFICATIONS

For complete specifications and recommended PCB layouts see [www.samtec.com?BTH](http://www.samtec.com?BTH)

**Insulator Material:**  
Black LCP

**Contact Material:**  
Phosphor Bronze

**Plating:**

Au or Sn over  
50 µ" (1.27 µm) Ni

**Current Rating:**  
2.0 A per pin  
(2 pins powered)

**Flammability Rating:**  
UL 94 VO

**Operating Temp Range:**  
-55 °C to +125 °C

**Voltage Rating:** 175 VAC

**Max Cycles:** 100

**RoHS Compliant:** Yes

## PROCESSING

**Lead-Free Solderable:**  
Yes

**SMT Lead Coplanarity:**

Vertical=  
(0.10 mm) .004" max (030-090)

Vertical=  
(0.15 mm) .006" max (120-150)\*

Right-angle=  
(0.15 mm) .006" max (030-090)\*

\*(.004" stencil solution  
may be available; contact  
IPG@samtec.com)

**Board Stacking:**

For applications requiring more  
than two connectors per board  
or 90 positions or higher,  
contact ipg@samtec.com

## RECOGNITIONS

For complete scope of  
recognitions see  
[www.samtec.com/quality](http://www.samtec.com/quality)



## ALSO AVAILABLE (MOQ Required)

- 30 µ" (0.76 µm) Gold
- Edge Mount Capability
- 8 mm, 11 mm, 16 mm, 19 mm and 22 mm Stack Height (Caution: Some automatic placement/inspection machines may have component height restrictions. Please consult machinery specifications.) (11 mm, 16 mm, 19 mm and 22 mm not available with 50 positions)

**Note:**  
Some lengths, styles and  
options are non-standard,  
non-returnable.

<b>BTH</b>	<b>NO. OF POSITIONS PER ROW</b>	<b>01</b>	<b>PLATING OPTION</b>	<b>D</b>	<b>A</b>	<b>OTHER OPTION</b>					
<b>Mates with:</b> BSH		<p><b>-030, -050, -060, -090, -120, -150</b></p>		<p><b>-F</b> = Gold Flash on contact, Matte Tin on tail</p> <p><b>-L</b> = 10 µ" (0.25 µm) Gold on contact, Matte Tin on tail</p> <p><b>-C*</b> = Electro-Polished Selective 50 µ" (1.27 µm) min Au over 150 µ" (3.81 µm) Ni on Signal Pins in contact area, Matte Tin over 50 µ" (1.27 µm) min Ni on all solder tails</p> <p><b>*Note:</b> -C Plating passes 10 year MFG testing</p>		<p><b>-K</b> = (7.00 mm) .276" DIA Polyimide Film Pick &amp; Place Pad</p> <p><b>-TR</b> = Tape &amp; Reel (120 positions maximum)</p> <p><b>-FR</b> = Full Reel Tape &amp; Reel (must order maximum quantity per reel; contact Samtec for quantity breaks) (120 positions maximum)</p>					
<b>MATED HEIGHT</b>		<table border="1"> <thead> <tr> <th>LEAD STYLE</th> <th>MATED HEIGHT*</th> </tr> </thead> <tbody> <tr> <td><b>-01</b></td> <td>(5.00) .197</td> </tr> </tbody> </table> <p>*Processing conditions will affect mated height.</p>		LEAD STYLE	MATED HEIGHT*	<b>-01</b>	(5.00) .197				
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<b>BTH</b>	<b>NO. OF POSITIONS PER ROW</b>	<b>01</b>	<b>PLATING OPTION</b>	<b>D</b>	<b>RA</b>	<b>WT</b>	<b>OTHER OPTION</b>	
<b>Mates with:</b> BSH		<p><b>-030, -060, -090</b></p>		<p><b>-F</b> = Gold Flash on contact, Matte Tin on tail</p> <p><b>-L</b> = 10 µ" (0.25 µm) Gold on contact, Matte Tin on tail</p>		<p><b>-K</b> = (7.00 mm) .276" DIA Polyimide Film Pick &amp; Place Pad</p>		

Due to technical progress, all designs, specifications and components are subject to change without notice.

[WWW.SAMTEC.COM](http://WWW.SAMTEC.COM)

All parts within this catalog are built to Samtec's specifications.

Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.

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Authorized Distributor

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