

PIN GRID ARRAY SOCKETS MPAS, MVAS, MHAS, MSAS

Mates with:
MPAT, MVAT, MHAT, MSAT

SPECIFICATIONS

For complete specifications see www.samtec.com?MPAS or www.samtec.com?MVAS

MPAS, MVAS
Insulator Material:
Black G.F. Polyester



Contact: BeCu
Shell: Brass except
Style K Phosphor Bronze



Operating Temp Range:
-55°C to +105°C with Tin
-55°C to +125°C with Gold

Plating: Au over 50µ" (1,27µm)
Ni or Sn over 100µ" (2,58µm)
Cu or 50µ" (1,27µm) Ni

Current Rating: 1A
Contact Resistance:
10mΩ max

Lead Size Range:
.015" (0,38mm) to
.022" (0,56mm) DIA except

Style ZL = .015" (0,38mm) to
.020" (0,51mm) DIA;
ZM = .016" (0,41mm) to
.021" (0,53mm) DIA;
ZN = .016" (0,41mm) to
.020" (0,51mm) DIA

Insertion Force:
(Single contact only) Style ZU
= 1.5oz (0,42N) max, all others
= 2.5 oz (0,69N) avg, 5.5 oz
(1,53N) max, except Styles J
& K = 9 oz (2,50N) avg, 16 oz
(4,45N) max

Withdrawal Force:
(Single contact only) Style ZU
= 1.5oz (0,42N) max, all others
= 2.0 oz (0,56N) avg, 0.35 oz
(0,97N) min, except Styles J &
K = 2.5 oz (0,69N) avg, 1.5 oz
(0,42N) min

Lead-Free Solderable:
Wave, only
RoHS Compliant:
No

SPECIFICATIONS

For complete specifications see www.samtec.com?MHAS

MHAS
Same as
MPAS except:



Insulator Material:
Black High Temp. Plastic

SPECIFICATIONS

For complete specifications see www.samtec.com?MSAS

MSAS
Same as
MPAS except:



Insulator Material:
Black Liquid Crystal Polymer
Max Processing Temp:
230°C for 30 to 60 seconds

BODY STYLE	PIN COUNT	LEAD STYLE	PLATING OPTION	PIN OUT CODE	OPTION
<p>MPAS = Standard Polyester</p> <p>MVAS = Open Body Polyester</p> <p>MSAS = Hi-Temp LCP Open Body</p>	<p>— "XXX"</p> <p>= Total Number of Filled Positions</p>	<p>GG = 30µ" (0,76µm) Gold Contact, 10µ" (0,25µm) Gold Shell</p> <p>GT = 30µ" (0,76µm) Gold Contact, Tin Shell</p> <p>TT = Tin Contact and Shell (Styles -ZS & ZW Only)</p> <p>ST = 10µ" (5,08µm) Gold Contact, Tin Shell (Style -ZS only)</p>	<p>-2 = (9,14).360 Wire-Wrap (-ZW Only)</p> <p>-3 = (6,60).260 Wire-Wrap (-ZW Only)</p> <p>-L = Locking Socket (-ZS Only)</p> <p>Requires GT Plating Option</p>		
<p>MHAS = Low Profile</p>	<p>ALSO AVAILABLE</p> <p>RoHS compliant options. Call Samtec.</p>				



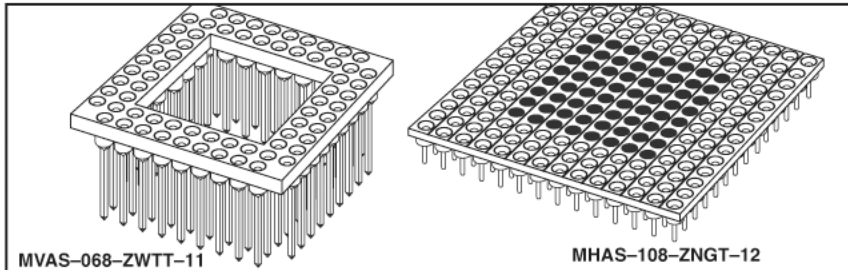
Note: Some sizes, styles and options are non-standard, non-returnable.

-ZS, -ZU, -ZA, -J, -K = Printed Circuit	-ZW = Wire-Wrap	-ZE or -ZH = Elevated																																			
<p>Locking lead (-L) available. See OPTION.</p> <table border="1"> <thead> <tr> <th>LEAD STYLE</th> <th>X DIA</th> <th>Y TAIL</th> <th>Z OAL</th> </tr> </thead> <tbody> <tr> <td>-ZS, -ZU</td> <td>(0,51) .020</td> <td>(3,18) .125</td> <td>(7,62) .300</td> </tr> <tr> <td>-ZA</td> <td>(0,51) .020</td> <td>(4,57) .180</td> <td>(8,89) .360</td> </tr> <tr> <td>-J</td> <td>(0,64) .025</td> <td>(10,41) .410</td> <td>(15,24) .600</td> </tr> <tr> <td>-K</td> <td>(0,89) .035</td> <td>(12,95) .510</td> <td>(17,86) .703</td> </tr> </tbody> </table> <p>Insertion Depth = .095" to .145", Style ZS Component Part No. = EZ-1P1 Style ZU Component Part No. = EZ-6P1 Option L Component Part No. = SC-1L1 or EZ-1L1 Insertion Depth = .095" to .138", Style J Component Part No. = SC-1P3 Insertion Depth = .095" to .157", Style K Component Part No. = SC-2P1</p> <p>Styles J & K = 16 oz/pin insertion force</p>	LEAD STYLE	X DIA	Y TAIL	Z OAL	-ZS, -ZU	(0,51) .020	(3,18) .125	(7,62) .300	-ZA	(0,51) .020	(4,57) .180	(8,89) .360	-J	(0,64) .025	(10,41) .410	(15,24) .600	-K	(0,89) .035	(12,95) .510	(17,86) .703	<p>MHAS NOT AVAILABLE Shorter w/w tail lengths available. See OPTION.</p> <p>Insertion Depth = .125" to .157", Style ZW Component Part No. = EZ-1W(1) Style ZW-2 Component Part No. = EZ-1W(2) Style ZW-3 Component Part No. = EZ-1W(3)</p>	<p>MHAS NOT AVAILABLE</p> <table border="1"> <thead> <tr> <th>LEAD STYLE</th> <th>X DIA</th> <th>W TAIL</th> <th>Y</th> <th>Z OAL</th> </tr> </thead> <tbody> <tr> <td>-ZE</td> <td>(0,51) .020</td> <td>(4,32) .170</td> <td>(8,86) .349</td> <td>(13,77) .542</td> </tr> <tr> <td>-ZH</td> <td>(0,46) .018</td> <td>(3,81) .150</td> <td>(12,95) .510</td> <td>(17,86) .703</td> </tr> </tbody> </table> <p>Insertion Depth = .125" to .170", Style ZE Component Part No. = EZ-2P3 Insertion Depth = .125" to .145", Style ZH Component Part No. = EZ-2P2</p>	LEAD STYLE	X DIA	W TAIL	Y	Z OAL	-ZE	(0,51) .020	(4,32) .170	(8,86) .349	(13,77) .542	-ZH	(0,46) .018	(3,81) .150	(12,95) .510	(17,86) .703
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<p>-ZL = Low Profile</p> <p>Insertion Depth = .105" to .170", Component No. = EZ-3P1</p>	<p>-ZM = Low Profile</p> <p>MHAS & CHAS SERIES ONLY.</p> <p>Insertion Depth = .080" to .105", Component No. = EZ-4P1</p>	<p>-ZN or ZC = Micro Socket</p> <p>MHAS & CHAS SERIES ONLY.</p> <table border="1"> <thead> <tr> <th>LEAD STYLE</th> <th>X DIA</th> <th>W HEAD</th> <th>Y</th> <th>Z OAL</th> </tr> </thead> <tbody> <tr> <td>-ZN</td> <td>(0,76) .030</td> <td>(0,51) .020</td> <td>(2,41) .095</td> <td>(4,83) .190</td> </tr> <tr> <td>-ZC</td> <td>(0,74) .029</td> <td>(0,25) .010</td> <td>(2,11) .083</td> <td>(4,19) .165</td> </tr> </tbody> </table> <p>ZN Insertion Depth = .080" to .150", ZN Component No. = EZ-5P1 ZC Insertion Depth = .080" to .140", ZC Component No. = EZ-6P1</p>	LEAD STYLE	X DIA	W HEAD	Y	Z OAL	-ZN	(0,76) .030	(0,51) .020	(2,41) .095	(4,83) .190	-ZC	(0,74) .029	(0,25) .010	(2,11) .083	(4,19) .165																				
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MVAS-068-ZWTT-11

MHAS-108-ZNGT-12

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CALL SAMTEC.**

<p>-21=273 Pins</p> <p>MSAS only.</p>	<p>-18=191 Pins</p> <p>MSAS only.</p>	<p>-18=179 Pins</p> <p>MSAS only.</p>	<p>-17=240 Pins</p> <p>MVAS & MSAS not available.</p>	<p>-17=209 Pins</p> <p>MSAS not available.</p>
<p>-17=169 Pins</p> <p>MSAS only.</p>	<p>-17=168 Pins</p> <p>MSAS only.</p>	<p>-16=172 Pins</p> <p>MVAS & MSAS not available.</p>	<p>-16=156 Pins</p> <p>MSAS only.</p>	<p>-15=181 Pins</p> <p>MVAS not available.</p>
<p>-15=176 Pins</p> <p>MSAS not available.</p>	<p>-15B=149 Pins</p> <p>MVAS & MSAS not available.</p>	<p>-15=145 Pins</p> <p>MVAS not available.</p>	<p>-14=132 Pins</p> <p>MVAS & MSAS not available.</p>	<p>-13=169 Pins</p> <p>MVAS & MSAS not available.</p>
<p>-13B=132 Pins</p> <p>MVAS & MSAS not available.</p>	<p>-13A=124 Pins</p> <p>MVAS & MSAS not available.</p>	<p>-13A=121 Pins</p> <p>MSAS not available.</p>	<p>-13=114 Pins</p> <p>MSAS not available.</p>	<p>-13=101 Pins</p> <p>MVAS & MSAS not available.</p>
<p>-11=085 Pins</p> <p>MVAS & MSAS not available.</p>	<p>-11C=084 Pins</p> <p>MSAS not available.</p>	<p>-11=069 Pins</p> <p>MSAS not available.</p>	<p>-11=068 Pins</p> <p>MVAS & MSAS not available.</p>	<p>-10=084 Pins</p> <p>MVAS & MSAS not available.</p>
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