

(2,54mm) .100"

MPAS, MVAS, MSAS SERIES

# PIN GRID ARRAY SOCKETS

Mates with:  
MPAT, MVAT, MHAT, MSAT

## SPECIFICATIONS

For complete specifications see [www.samtec.com?MPAS](http://www.samtec.com?MPAS) or [www.samtec.com?MVAS](http://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

**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

**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

**Lead-Free Solderable:**  
Wave, only

**RoHS Compliant:**  
No

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

## SPECIFICATIONS

For complete specifications see [www.samtec.com?MSAS](http://www.samtec.com?MSAS)

**MSAS**  
Same as  
MPAS except:  
Insulator Material:  
Black Liquid Crystal Polymer



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

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



### –ZW = Wire Wrap

Shorter w/w tail lengths available. See OPTION.

Insertion Depth = .125" to .157"  
Style ZW Component Part No. = EZ-1W1(1)  
Style ZW-2 Component Part No. = EZ-1W1(2)  
Style ZW-3 Component Part No. = EZ-1W1(3)

### –ZE = Elevated

Insertion Depth = .125" to .170"  
Style ZE Component Part No. = EZ-2P3

### –ZS, –ZU, –ZA = Printed Circuit

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

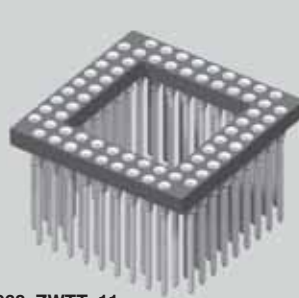
| LEAD STYLE | X DIA       | Y TAIL      | Z OAL       |
|------------|-------------|-------------|-------------|
| –ZS, –ZU   | (0,51) .020 | (3,18) .125 | (7,62) .300 |
| –ZA        | (0,51) .020 | (4,57) .180 | (8,89) .350 |

Locking lead (–L) available. See OPTION.

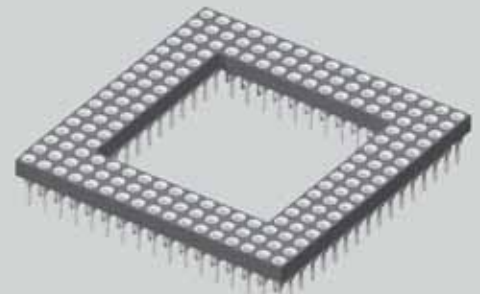
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MVAS-068-ZWTT-11



MVAS-168-ZSGG-17

**MORE STANDARD PIN-OUTS AVAILABLE.  
CALL SAMTEC.**

|   |   |  |  |  |   |
|---|---|--|--|--|---|
| <p><b>-21=273 Pins</b></p> <p>MSAS only.</p>                      | <p><b>-18=191 Pins</b></p> <p>MSAS only.</p>                      | <p><b>-18=179 Pins</b></p> <p>MSAS only.</p>                     | <p><b>-17=240 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-17=209 Pins</b></p> <p>MSAS not available.</p>            |   |
| <p><b>-17=169 Pins</b></p> <p>MVAS &amp; MSAS not available.</p>  | <p><b>-17=168 Pins</b></p> <p>MVAS &amp; MSAS not available.</p>  | <p><b>-16=172 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-16=156 Pins</b></p> <p>MSAS only.</p>                     | <p><b>-15=181 Pins</b></p> <p>MVAS not available.</p>            |   |
| <p><b>-15=176 Pins</b></p> <p>MSAS not available.</p>             | <p><b>-15B=149 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-15=145 Pins</b></p> <p>MVAS not available.</p>            | <p><b>-14=132 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-13=169 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-13A=133 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> |
| <p><b>-13B=132 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-13A=124 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-13A=121 Pins</b></p> <p>MSAS not available.</p>           | <p><b>-13=114 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-13=101 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-13=088 Pins</b></p> <p>MSAS not available.</p>             |
| <p><b>-11=085 Pins</b></p> <p>MVAS &amp; MSAS not available.</p>  | <p><b>-11C=084 Pins</b></p> <p>MSAS not available.</p>            | <p><b>-11=069 Pins</b></p> <p>MSAS not available.</p>            | <p><b>-11=068 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-10=084 Pins</b></p> <p>MVAS &amp; MSAS not available.</p> | <p><b>-10=068 Pins</b></p> <p>MSAS not available.</p>             |

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