

(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> = 30µ" (0,76µm) Gold Contact, 10µ" (0,25µm) Gold Shell</p> <p><b>GT</b> = 30µ" (0,76µm) Gold Contact, Tin Shell</p> <p><b>TT</b> = Tin Contact and Shell (Styles –ZS &amp; ZW Only)</p> <p><b>ST</b> = 10µ" (5,08µm) Gold Contact, Tin Shell (Style –ZS only)</p>	<p><b>–2</b> = (9,14) .360 Wire-Wrap (–ZW Only)</p> <p><b>–3</b> = (6,60) .260 Wire-Wrap (–ZW Only)</p> <p><b>–L</b> = 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

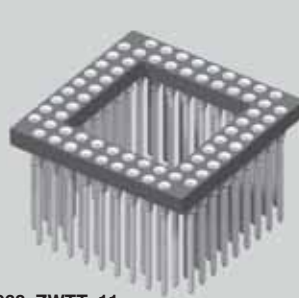
LEAD STYLE	X DIA	Y TAIL	Z OAL
–ZS, –ZU	(0,51) .020	(3,18) .125	(7,62) .300
–ZA	(0,51) .020	(4,57) .180	(8,89) .350

Locking lead (–L) available. See OPTION.

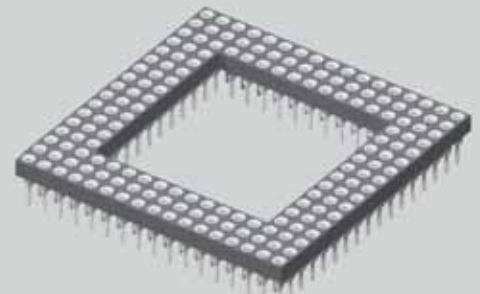
Due to technical progress, all designs, specifications and components are subject to change without notice.

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

SAMTEC USA • Tel: 1-800-SAMTEC-9 or 812-944-6793 SAMTEC SILICON VALLEY • Tel: 408-395-5900 SAMTEC SOUTHERN CALIFORNIA • Tel: 1-800-726-8329  
 SAMTEC AMERICA LATINA COMERCIO EXTERIOR LTDA • Tel: (+55 31) 3786 3227 SAMTEC UNITED KINGDOM • Tel: 44 01236 739292 SAMTEC GERMANY • Tel: +49 (0) 89 / 89460-0  
 SAMTEC FRANCE • Tel: 33 01 60 95 06 60 SAMTEC ITALY • Tel: 39 039 8990337 SAMTEC NORDIC/BALTIC • Tel: +46-84477280 SAMTEC BENELUX • Tel: 44 01236 739292 SAMTEC ISRAEL • Tel: 972-3-7526600  
 SAMTEC INDIA • Tel: +91-80-3272 1612 SAMTEC ASIA PACIFIC • Tel: 65 6745-5955 SAMTEC JAPAN • Tel: 045-475-1385 SAMTEC CHINA • Tel: 86-21-61103766 SAMTEC TAIWAN • Tel: 886-2-2735-6109  
 SAMTEC HONG KONG • Tel: 852-2600-9858 SAMTEC KOREA • Tel: 82-31-717-5685 SAMTEC ANZ • Tel: 613 9512 7747 SAMTEC SOUTH AFRICA • Tel: 27 11 452 8112



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>

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

**WWW.SAMTEC.COM**

SAMTEC USA • Tel: 1-800-SAMTEC-9 or 812-944-6793 SAMTEC SILICON VALLEY • Tel: 408-395-5900 SAMTEC SOUTHERN CALIFORNIA • Tel: 1-800-726-8329  
 SAMTEC AMERICA LATINA COMERCIO EXTERIOR LTDA • Tel: (+55 31) 3786 3227 SAMTEC UNITED KINGDOM • Tel: 44 01236 739292 SAMTEC GERMANY • Tel: +49 (0) 89 / 89460-0  
 SAMTEC FRANCE • Tel: 33 01 60 95 06 60 SAMTEC ITALY • Tel: 39 039 8890337 SAMTEC NORDIC/BALTIC • Tel: +46-84477280 SAMTEC BENELUX • Tel: 44 01236 739292 SAMTEC ISRAEL • Tel: 972-3-7526600  
 SAMTEC INDIA • Tel: +91-80-3272 1612 SAMTEC ASIA PACIFIC • Tel: 65 6745-5955 SAMTEC JAPAN • Tel: 045-475-1385 SAMTEC CHINA • Tel: 86-21-61103766 SAMTEC TAIWAN • Tel: 886-2-2735-6109  
 SAMTEC HONG KONG • Tel: 852-2600-9858 SAMTEC KOREA • Tel: 82-31-717-5685 SAMTEC ANZ • Tel: 613 9512 7747 SAMTEC SOUTH AFRICA • Tel: 27 11 452 8112