## Bi-Level, .050"[1.27mm] / .100" [2.54] Contact Centers

High Density, Card Extender, Dip Solder

## SPECIFICATIONS

- .050" Contact Center Spacing can replace $.100^{\prime \prime}$ CC parts to double the number of contacts within the same area
- Backwards Compatible with Daughter Card Side
- Accommodates $.062^{\prime \prime} \pm .008^{\prime \prime}[1.57 \pm .20]$ PC board
- Contact Material: Beryllium Copper or Phosphor Bronze
- Body Material: PPS/PA9T
- UL Flammability: 94V-0
- 3 amp current rating per contact
- 75 grams minimum contact normal force
- Voltage Rating: 125 VDC Minimum at sea level
- Consult Factory for PC board layouts/technical drawings


## HIGH DENSITY HIGH TEMPERATURE HIGH CYCLE HIGH RELIABILITY



DAUGHTER CARD LAYOUT (1)


DAUGHTER CARD LAYOUT (2)


Bi-Level, .050"[1.27mm] / 100" [2.54] Contact Centers High Density, Card Extender, Dip Solder

PART NUMBER CODING
MATERIALS (INSULATOR/CONTACT)
G = PA9T/Phosphor Bronze
Operating Temperature: $125^{\circ} \mathrm{C}$
$R=$ PPS and PA9T/Phosphor Bronze Operating Temperature: $125^{\circ} \mathrm{C}$
$\mathrm{J}=$ PA9T/Beryllium Copper
Operating Temperature: $150^{\circ} \mathrm{C}$
A = PPS and PA9T/Beryllium Copper
Operating Temperature: $150^{\circ} \mathrm{C}$
CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have $\mathbf{. 0 0 0 0 5 0 " ~ N i c k e l ~ u n d e r p l a t e ~}$

Contact Surface
B $=\quad .000010^{\prime \prime}$ Gold
C = .000030" Gold
$Y=\quad .000030^{\prime \prime}$ Gold
CONTACT CENTER

| Positions | $\begin{gathered} \text { Dimension A } \\ \text { (see opposite page) } \end{gathered}$ |  |  | Daughter Card Layout |
| :---: | :---: | :---: | :---: | :---: |
|  | No. of Contacts | Inches | [MM] |  |
| 06 | 12 | 0.200 | 5.08 | 1 |
| 08 | 16 | 0.300 | 7.62 | 2 |
| 10 | 20 | 0.400 | 10.16 | 1 |
| 12 | 24 | 0.500 | 12.70 | 2 |
| 14 | 28 | 0.600 | 15.24 | 1 |
| 16 | 32 | 0.700 | 17.78 | 2 |
| 18 | 36 | 0.800 | 20.32 | 1 |
| 20 | 40 | 0.900 | 22.86 | 2 |
| 22 | 44 | 1.000 | 25.40 | 1 |
| 24 | 48 | 1.100 | 27.94 | 2 |
| 26 | 52 | 1.200 | 30.48 | 1 |
| 28 | 56 | 1.300 | 33.02 | 2 |
| 30 | 60 | 1.400 | 35.56 | 1 |
| 32 | 64 | 1.500 | 38.10 | 2 |
| 34 | 68 | 1.600 | 40.64 | 1 |
| 36 | 72 | 1.700 | 43.18 | 2 |
| 38 | 76 | 1.800 | 45.72 | 1 |
| 40 | 80 | 1.900 | 48.26 | 2 |
| 42 | 84 | 2.000 | 50.80 | 1 |
| 44 | 88 | 2.100 | 53.34 | 2 |
| 46 | 92 | 2.200 | 55.88 | 1 |
| 48 | 96 | 2.300 | 58.42 | 2 |
| 50 | 100 | 2.400 | 60.96 | 1 |
| 52 | 104 | 2.500 | 63.50 | 2 |
| 54 | 108 | 2.600 | 66.04 | 1 |
| 56 | 112 | 2.700 | 68.58 | 2 |
| 58 | 116 | 2.800 | 71.12 | 1 |
| 60 | 120 | 2.900 | 73.66 | 2 |
| 62 | 124 | 3.000 | 76.20 | 1 |
| 64 | 128 | 3.100 | 78.74 | 2 |
| 66 | 132 | 3.200 | 81.28 | 1 |
| 68 | 136 | 3.300 | 83.82 | 2 |
| 70 | 140 | 3.400 | 86.36 | 1 |
| 72 | 144 | 3.500 | 88.90 | 2 |
| 74 | 148 | 3.600 | 91.44 | 1 |
| 76 | 152 | 3.700 | 93.98 | 2 |
| 78 | 156 | 3.800 | 96.52 | 1 |
| 80 | 160 | 3.900 | 99.06 | 2 |
| 82 | 164 | 4.000 | 101.60 | 1 |
| 84 | 168 | 4.100 | 104.14 | 2 |
| 86 | 172 | 4.200 | 106.68 | 1 |
| 88 | 176 | 4.300 | 109.22 | 2 |
| 90 | 180 | 4.400 | 111.76 | 1 |



Bi-Level, .050"[1.27mm] / .100" [2.54] Contact Centers

## SPECIFICATIONS

- .050" Contact Center Spacing can replace $.100^{\prime \prime}$ CC parts to double the number of contacts within the same area
- Backwards Compatible with Daughter Card Side
- Accommodates $.062^{\prime \prime} \pm .008^{\prime \prime}[1.57 \pm .20]$ PC board
- Contact Material: Beryllium Copper or Phosphor Bronze
- Body Material: PPS/PA9T
- UL Flammability: 94V-0
- 3 amp current rating per contact
- 75 grams minimum contact normal force
- Voltage Rating: 125 VDC Minimum at sea level
- Consult Factory for PC board layouts/technical drawings


HIGH DENSITY
HIGH TEMPERATURE

## HIGH CYCLE

HIGH RELIABILITY

DIMENSIONS Dimensions in [] are in millimeters, all others are in inches.


## DAUGHTER CARD LAYOUT (1)



DAUGHTER CARD LAYOUT (2)


Infratron GmbH • Tel. +49 (0) 89 / 158 126-0 • http://www.infratron.de • e-mail: info@infratron.de

## PART NUMBER CODING

## A C B 10 D KB S - S1075

MATERIALS (INSULATOR/CONTACT)
G = PA9T/Phosphor Bronze
Operating Temperature: $125^{\circ} \mathrm{C}$
$\mathrm{R}=\mathrm{PPS}$ and PA9T/Phosphor Bronze Operating Temperature: $125^{\circ} \mathrm{C}$
$\mathrm{J}=$ PA9T/Beryllium Copper
Operating Temperature: $150^{\circ} \mathrm{C}$
A $=$ PPS and PA9T/Beryllium Copper Operating Temperature: $150^{\circ} \mathrm{C}$
CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have $\mathbf{. 0 0 0 0 5 0 " N i c k e l ~ u n d e r p l a t e ~}$ Contact Surface
B = .000010" Gold
$\mathrm{C}=\quad .000030^{\prime \prime}$ Gold
Y = .000030" Gold
CONTACT CENTERS
$B=.050^{\prime \prime}[1.27 \mathrm{~mm}]$

| Positions | Dimension A (see opposite page) |  |  | Daughter Card Layout |
| :---: | :---: | :---: | :---: | :---: |
|  | No. of Contacts | Inches | [MM] |  |
| 06 | 12 | 0.200 | 5.08 | 1 |
| 08 | 16 | 0.300 | 7.62 | 2 |
| 10 | 20 | 0.400 | 10.16 | 1 |
| 12 | 24 | 0.500 | 12.70 | 2 |
| 14 | 28 | 0.600 | 15.24 | 1 |
| 16 | 32 | 0.700 | 17.78 | 2 |
| 18 | 36 | 0.800 | 20.32 | 1 |
| 20 | 40 | 0.900 | 22.86 | 2 |
| 22 | 44 | 1.000 | 25.40 | 1 |
| 24 | 48 | 1.100 | 27.94 | 2 |
| 26 | 52 | 1.200 | 30.48 | 1 |
| 28 | 56 | 1.300 | 33.02 | 2 |
| 30 | 60 | 1.400 | 35.56 | 1 |
| 32 | 64 | 1.500 | 38.10 | 2 |
| 34 | 68 | 1.600 | 40.64 | 1 |
| 36 | 72 | 1.700 | 43.18 | 2 |
| 38 | 76 | 1.800 | 45.72 | 1 |
| 40 | 80 | 1.900 | 48.26 | 2 |
| 42 | 84 | 2.000 | 50.80 | 1 |
| 44 | 88 | 2.100 | 53.34 | 2 |
| 46 | 92 | 2.200 | 55.88 | 1 |
| 48 | 96 | 2.300 | 58.42 | 2 |
| 50 | 100 | 2.400 | 60.96 | 1 |
| 52 | 104 | 2.500 | 63.50 | 2 |
| 54 | 108 | 2.600 | 66.04 | 1 |
| 56 | 112 | 2.700 | 68.58 | 2 |
| 58 | 116 | 2.800 | 71.12 | 1 |
| 60 | 120 | 2.900 | 73.66 | 2 |
| 62 | 124 | 3.000 | 76.20 | 1 |
| 64 | 128 | 3.100 | 78.74 | 2 |
| 66 | 132 | 3.200 | 81.28 | 1 |
| 68 | 136 | 3.300 | 83.82 | 2 |
| 70 | 140 | 3.400 | 86.36 | 1 |
| 72 | 144 | 3.500 | 88.90 | 2 |
| 74 | 148 | 3.600 | 91.44 | 1 |
| 76 | 152 | 3.700 | 93.98 | 2 |
| 78 | 156 | 3.800 | 96.52 | 1 |
| 80 | 160 | 3.900 | 99.06 | 2 |
| 82 | 164 | 4.000 | 101.60 | 1 |
| 84 | 168 | 4.100 | 104.14 | 2 |
| 86 | 172 | 4.200 | 106.68 | 1 |
| 88 | 176 | 4.300 | 109.22 | 2 |
| 90 | 180 | 4.400 | 111.76 | 1 |



OMIT FOR STANDARD
S - S1075 = Staggered Ears with Side Mounting Holes
A - S1076 = Staggered Ears with \#4-40 Threaded Inserts

Bi-Level, .078"[1.98mm] / .156" [3.96] Contact Centers

## SPECIFICATIONS

- . $078{ }^{\prime \prime}$ Contact Center Spacing can replace $.156^{\prime \prime}$ CC parts to double the number of contacts within the same area
- Backwards Compatible with Daughter Card Side
- Accommodates .062" $\pm .008$ "[1.57 $\pm .20]$ PC board
- Contact Material:Beryllium Copper or Phosphor Bronze
- Body Material:PPS/PA9T
- UL Flammability: 94V-0
- 3 amp current rating per contact
- 75 grams minimum contact normal force
- Voltage Rating: 125 VDC Minimum at sea level
- Consult Factory for PC board layouts/technical drawings


TERMINATION TYPE

.541[13.73] INSERTION DEPTH
. $100[2.54]$

x-

RIGHT ANGLE (KB)

HIGH DENSITY
HIGH TEMPERATURE
HIGH CYCLE
HIGH RELIABILITY

DIMENSIONS Dimensions in $[1]$ are in millimeters, all others are in inches.


| MATERIALS (INSULATOR/CONTACT) |  |
| ---: | :--- |
| G | $=$ PA9T/Phosphor Bronze |
| Operating Temperature: $125^{\circ} \mathrm{C}$ |  |
| R | $=$ PPS and PATT/Phosphor Bronze |
| Operating Temperature: $125^{\circ} \mathrm{C}$ |  |
| J | $=$ PA9T/Beryllium Copper |
| Operating Temperature: $150^{\circ} \mathrm{C}$ |  |
| A | $=$ PPS and PA9T/Beryllium Copper |
| Operating Temperature: $150^{\circ} \mathrm{C}$ |  | A C K 10 D KB S - Sxxx

TERIALS (INSULATOR/CONTACT)
Operating Temperature: $125^{\circ} \mathrm{C}$
R = PPS and PA9T/Phosphor Bronze Operating Temperature: $125^{\circ} \mathrm{C}$
J Operating Temperature
A $=$ PPS and PA9T/Beryllium Copper
Operating Temperature: $150^{\circ} \mathrm{C}$
CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have $\mathbf{. 0 0 0 0 5 0 " ~ N i c k e l ~ u n d e r p l a t e ~}$ Contact Surface

Termination
B $=\quad .000010^{\prime \prime}$ Gold $\quad .000100^{\prime \prime}$ Pure Tin, Matte
$\mathrm{C}=.000030^{\prime \prime}$ Gold $\quad .000100^{\prime \prime}$ Pure Tin, Matte
$Y=\quad .000030^{\prime \prime}$ Gold .000005 " Gold

OMIT FOR STANDARD
S-S1075 = Staggered Ears with Side Mounting Holes
A - S1076 = Staggered Ears with \#4-40 Threaded Inserts

## CONTACT CENTERS

$K=.078^{\prime \prime}[1.98 \mathrm{~mm}]$

## GENERAL SPECIFICATIONS

## RoHS COMPLIANT

RoHs
COMPLIANT
All parts are currently manufactured with recommended materials to meet RoHS standards. All contacts have $50 \mathrm{u}^{\prime \prime}$ of nickel underplating, and a large selection of plating options: Pure tin matte, overall gold, or selective gold plating. For complete part number information or operating/processing temperature parameters, visit the RoHS section of our website, or refer to page 5 of this catalog.

## MATERIALS

Insulator

- PBT, Valox*, Thermoplastic Polyester
- PPS, Ryton*, Polyphenylene Sulfide
- PEEK, Polyetheretherketone
- PA9T, High Temperature Polyamide
- Other materials available. Consult Factory


## Contacts

Phosphor Bronze (Standard), Beryllium Copper, Beryllium Nickel, Spinodal**, Brass
Plating
Gold and/or Tin over .000050" Nickel Underplate, Lead Free
UL/CUL File Number: E64287
Cage Code: 54453

## MECHANICAL

Board Insertion Force 16 oz Maximum per contact pair using $.062^{\prime \prime}[1.58 \mathrm{~mm}]$ thick steel test blade Board Withdrawal Force 1 oz Minimum per contact pair using $.062^{\prime \prime}[1.58 \mathrm{~mm}]$ thick steel test blade
Special Insertion/Withdrawal forces available upon request

## ELECTRICAL

Insulation Resistance: 5,000 Mega Ohm
Dielectric Withstanding Voltage

| Contact Centers: | $.039^{\prime \prime}[1 \mathrm{~mm}]$ | $.050 "[1.27 \mathrm{~mm}]$ | $.100 "[2.54 \mathrm{~mm}]$ | $.125^{\prime \prime}[3.18 \mathrm{~mm}]$ | $.150 "[3.81 \mathrm{~mm}]$ | $.156 "[3.96 \mathrm{~mm}]$ |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voltage: | 125 VDC | 250 VDC | 600 VDC | 800 VDC | 1500 VDC | 1800 VDC |
|  | 225 VAC | 300 VAC | 750 VAC | 750 VAC | 900 VAC | 950 VAC |

Current Rating: $\quad 1$ to 5 amp per contact
Voltage Drop: $\quad 30$ milli volt at rated current
Contact Resistance: 30 milli ohm maximum at rated current

## ENVIRONMENTAL

Solvent resistance:
Operating Temperature:

Perchloroethylene, Freon 113, Freon 11, Trichloroethylene

| PBT | $-65^{\circ}$ to $+130^{\circ} \mathrm{C}$ | Phosphor Bronze | $-65^{\circ}$ to $+125^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- | :--- |
| PPS | $-65^{\circ}$ to $+200 / 220^{\circ} \mathrm{C}^{* * *}$ | Beryllium Copper | $-65^{\circ}$ to $+150^{\circ} \mathrm{C}$ |
| PEEK | $-65^{\circ}$ to $+250^{\circ} \mathrm{C}^{* * *}$ | Spinodal** | $-65^{\circ}$ to $+200^{\circ} \mathrm{C}$ |
| PA9T | $-65^{\circ}$ to $+150^{\circ} \mathrm{C}$ | Beryllium Nickel*** | $-65^{\circ}$ to $+300^{\circ} \mathrm{C}$ |

(Continuous temperatures, higher for short duration. Contact Factory for details.)

[^0]
# PART NUMBER OPTIONS 



## CONTACT CENTERS

$\mathrm{E}=1.00 \mathrm{~mm}\left[.039^{\prime \prime}\right]$
$B=.050^{\prime \prime}[1.27 \mathrm{~mm}]$
$\mathrm{K}=.078^{\prime \prime}[1.98 \mathrm{~mm}]$
$C=.100^{\prime \prime}[2.54 \mathrm{~mm}]$
$A=.125^{\prime \prime}[3.18 \mathrm{~mm}]$
$J=.150^{\prime \prime}[3.84 \mathrm{~mm}]$
$M=.156^{\prime \prime}[3.96 \mathrm{~mm}]$

## NUMBER OF CONTACT POSITIONS

## See applicable specification page

## READOUT

D = Dual
D = Dual Row/ Crimp to Center for Single Readout
H = Half Loaded
M = Male Edgecard

## Registered Trademarks

Sabic Innovative Plastics: Valox Phillips 66: Ryton
Gardner-Denver Co.: Wire Wrap RTP Compounder: PEEK

Sullins Electronics: Zero Lead Time Sullins Electronics: Sullins Underwriters Labs: UL Ametek: Spinodal

Specifications are subject to change without notice.


[^0]:    * Or equivalent.
    ** Consult factory for special soldering guidelines.
    *** Consult factory.

