

**Discrete Crimp-to-Wire Pins/Receptacles/Housings**  
**2.54 mm (0.100 in.)**

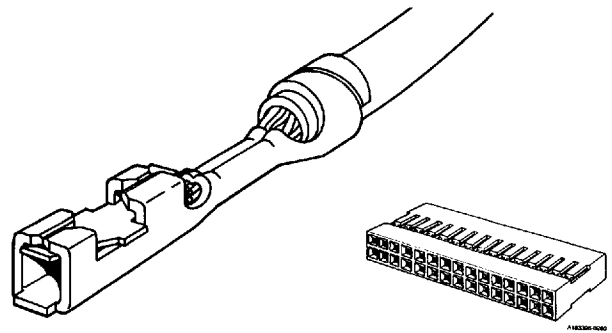
<b>Ordering Data</b>							
<b>Finishing Options</b>							
<b>Option</b>	<b>Contact Area</b>	<b>Remainder</b>		<b>Spring</b>			
1	2.54 µm (100 µin.) min 60/40 tin-lead	2.54 µm (100 µin.) min 60/40 tin-lead		0.76 µm (30 µin.) 93/7 tin-lead			
2	0.38 µm (15 µin.) min gold over nickel	Gold flash		Gold flash over nickel			
3	0.76 µm (30 µin.) min gold over nickel	Gold flash		Gold flash over nickel			
4	1.02 µm (40 µin.) min gold over nickel	Gold flash		Gold flash over nickel			
<b>Part Numbers</b>							
<b>Wire Size AWG</b>	<b>Insulation OD Size</b>	<b>Spring Force</b>	<b>Packaging</b>	<b>Finishing Option (see Finishing Options Table)</b>			
				<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
18, 20 or Two 22 or Two 24	1.07--1.52 mm (0.042--0.060 in.)	Standard	Reel	---	48241-000	48231-000	48276-000
		Standard	Loose piece	---	48250-000	48266-000	---
		High	Reel	47221-000	48244-000	48047-000	47441-000
		High	Loose piece	47716-000	48253-000	48232-000	47713-000
		Ultra-high	Reel	47648-000	48247-000	48052-000	47566-000
		Ultra-high	Loose piece	47749-000	48256-000	48233-000	47746-000
22, 24, 26 or Two 26 or Two 28	0.91--1.52 mm (0.036--0.060 in.)	Standard	Reel	47445-000	48242-000	48049-000	47457-000
		Standard	Loose piece	47747-000	48251-000	48235-000	47743-000
		High	Reel	47217-000	48245-000	48046-000	47439-000
		High	Loose piece	47715-000	48254-000	48234-000	47712-000
		Ultra-high	Reel	47649-000	48248-000	48051-000	47565-000
		Ultra-high	Loose piece	47750-000	48257-000	48236-000	47745-000
28, 30, 32 or Two 30 or Two 32	0.71--1.37 mm (0.028--0.054 in.)	Standard	Reel	47446-000*	48243-000*	48048-000*	47456-000*
		Standard	Loose piece	47748-000*	48252-000*	48238-000*	47742-000*
		High	Reel	47213-000*	48246-000*	48045-000*	47437-000*
		High	Loose piece	47714-000*	48255-000*	48237-000*	47711-000*
		Ultra-high	Reel	47650-000*	48249-000*	48050-000*	47564-000*
		Ultra-high	Loose piece	47751-000*	48258-000	48239-000*	47744-000*
32, 34, 36	0.51--1.02 mm (0.020--0.040 in.)	Standard	Reel	75543-009*	---	75543-015*	75543-003*
		Standard	Loose piece	75543-010*	---	75543-016*	75543-004*
		High	Reel	75543-007*	---	75543-013*	75543-001*
		High	Loose piece	75543-008*	---	75543-014*	75543-002*
		Ultra-high	Reel	75543-011*	---	75543-017*	75543-005*
		Ultra-high	Loose piece	75543-012*	---	75543-018*	75543-006*
Ordering data shown is for our standard product offering. For special sizes or high-volume orders, contact your authorized Berg Electronics representative.							
*Indicates UL recognition only.							

<b>Customer Support Materials</b>			
<b>Description</b>	<b>Order No.</b>	<b>Description</b>	<b>Order No.</b>
Customer Product Drawings.....	By Part No.	Application Drawings.....	TA-75, TA-146
Product Specifications.....	BUS-12-067	Product Samples.....	Upon Request

# Discrete Crimp-to-Wire Pins/Receptacles/Housings

2.54 mm (0.100 in.) Centerline

## Crimp-to-Wire Mini-PV™ Receptacle



### Features

- Dual-metal contact design provides constant retention force after repeated cycles.
- Choice of three spring thicknesses to meet specific insertion and withdrawal requirements.
- A wide range of application machines is offered to reduce application costs.
- Available in a variety of gold and tin-lead platings.

### Mating Data

Mates with most 2.54 mm (0.100 in.) min centerline products with 0.64 mm (0.025 in.) square or round pins. See Table below for mating pin lengths.

### Mating Pin Lengths

- Discrete applications
  - ▶ Minimum . . . . . 4.32 mm (0.170 in.)
  - ▶ Nominal . . . . . 5.08 mm (0.200 in.)
  - ▶ Maximum . . . . . 5.59 mm (0.220 in.)

- Housing applications
  - ▶ Minimum . . . . . 5.08 mm (0.200 in.)
  - ▶ Nominal . . . . . 5.84 mm (0.230 in.)
  - ▶ Maximum . . . . . 6.22 mm (0.245 in.)


### Berg Electronics Products Page


- Crimp-to-Wire Pin in Mini-Latch Housing . . . . . 13-10 and 13-16
- Friction Latch Passive Latching System II . . . . . 13-14
- BergStik® . . . . . 13-50
- BergPin® . . . . . 13-106 to 13-116
- Right-Angle 2-Row Header . . . . . 13-61
- Shrouded Header . . . . . 13-84 to 13-104

### Specifications

- ASTM B-122
- MIL-M-20693
- MIL-P-46129
- QQ-C-533
- ASTM B-579
- MIL-G-45204
- QQ-N-290
- QQ-B-613

### Approvals and Certifications

 File no. E66906

 File no. LR46923

### Application Equipment

#### Berg Electronics Products Page

- PV-250A Semi-automatic application machine . . . . . 13-34
- PV-272 Semi-automatic crimping machine . . . . . 13-34
- OL-740 Semi-automatic two-ton bench press . . . . . 13-35
- OL-700 Fully automatic application machine (14--26 AWG) . . . . . 13-35
- Handtools . . . . . 13-36

### Technical Data

#### Materials

- Body . . . . . Brass or cupro-nickel
- Spring . . . . . Beryllium-copper

#### Plating

- Option 1
  - ▶ Contact area . . . . . 2.54 μm (100 μin.) min 60/40 tin-lead
  - ▶ Remainder . . . . . 2.54 μm (100 μin.) min 60/40 tin-lead
  - ▶ Spring . . . . . 0.76 μm (30 μin.) 93/7 tin-lead
- Option 2
  - ▶ Contact area . . . . . 0.38 μm (15 μin.) min gold over nickel
  - ▶ Remainder . . . . . Gold flash
  - ▶ Spring . . . . . Gold flash over nickel
- Option 3
  - ▶ Contact area . . . . . 0.76 μm (30 μin.) min gold over nickel
  - ▶ Remainder . . . . . Gold flash
  - ▶ Spring . . . . . Gold flash over nickel
- Option 4
  - ▶ Contact area . . . . . 1.02 μm (40 μin.) min gold over nickel
  - ▶ Remainder . . . . . Gold flash
  - ▶ Spring . . . . . Gold flash over nickel
- Option 5
  - ▶ Contact area . . . . . 0.76 μm (30 μin.) min gold
  - ▶ Remainder . . . . . Cupro-nickel base material
  - ▶ Spring . . . . . Gold flash over nickel

#### Spring Thickness

- Standard (for use in Mini-Latch housings with 40--72 positions) . . . . . 0.09 mm (0.0035 in.)

- High (for use in Mini-Latch housings with 10--50 positions) . . . . . 0.12 mm (0.0048 in.)
- Ultra-high (for use in Mini-Latch housings with 2--20 positions) . . . . . 0.17 mm (0.0065 in.)

#### Electrical Performance

- Insulation resistance . . . . . 5000 MΩ min
- Contact resistance . . . . . 15 mΩ max after environmental tests
- Withstanding voltage . . . . . 1000 V ac rms
- Current rating . . . . . 3 amp continuous, depending on wire size

#### Mechanical Performance

- Insertion force (max), gold finish
  - ▶ Standard spring . . . . . 2.35 N (240 gf)
  - ▶ High spring . . . . . 4.41 N (450 gf)
  - ▶ Ultra high spring . . . . . 10.79 N (1100 gf)
- Withdrawal force (min), gold finish
  - ▶ Standard spring . . . . . 0.45 N (45 gf)
  - ▶ High spring . . . . . 0.75 N (75 gf)
  - ▶ Ultra high spring . . . . . 1.75 N (175 gf)
- Durability (mating cycles, gold finish) . . . . . 1000

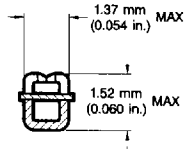
#### Operating Environment

- Temperature range . . . . . -65°C to +125°C
- Relative humidity range . . . . . 10% to 95%

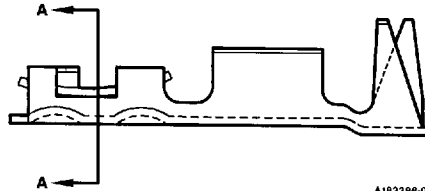
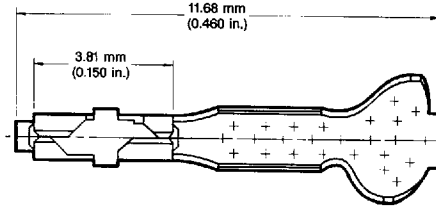
#### Packaging

- Reels
- Boxes (loose piece)

### Description



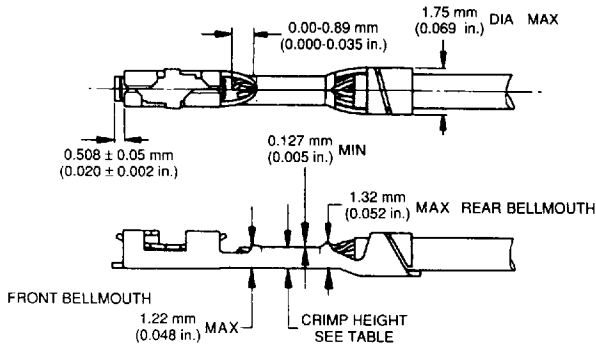
SECTION A-A



A183398-0281

### Crimping Specifications

MINI-PV™ TERMINAL



MINI-PV™ LATCH HOUSING



A183396-0282

Wire Size (AWG)	Crimp Height	Insulation Diameter	
		Loose Wire Application	Housing Application
18--20	1.07--1.12 mm (0.042--0.044 in.)	1.07--2.62 mm (0.042--0.103 in.)	1.07--1.52 mm (0.042--0.060 in.)
22--26	0.81--0.86 mm (0.032--0.034 in.)	0.91--2.62 mm (0.036--0.103 in.)	0.91--1.52 mm (0.036--0.060 in.)
28--32	0.66--0.71 mm (0.026--0.028 in.)	0.71--1.37 mm (0.028--0.054 in.)	0.71--1.37 mm (0.028--0.054 in.)
32--36	0.56--0.61 mm (0.022--0.024 in.)	0.51--1.02 mm (0.020--0.040 in.)	0.51--1.02 mm (0.020--0.040 in.)