

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

Ordering Data

				Finishing Options					
Option	Contact Area		Remainder		Spring				
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				
Part Numbers									
Wire Size AWG	Insulation OD Size	Spring Force	Packaging	Finishing Option (see Finishing Options Table)					
				1	2	3	4		
18, 20 or Two 22 or Two 24	1.07--1.52 mm (0.042--0.060 in.)	Standard Standard High High Ultra-high Ultra-high	Reel Loose piece Reel Loose piece Reel Loose piece	---	48241-000 48250-000 47221-000 47716-000 47649-000 47749-000	48231-000 48266-000 48244-000 48253-000 48247-000 48256-000	48232-000 47713-000 48047-000 47566-000 48052-000 48233-000	48276-000 --- 47441-000 47566-000 47746-000	
22, 24, 26 or Two 26 or Two 28	0.91--1.52 mm (0.036--0.060 in.)	Standard Standard High High Ultra-high Ultra-high	Reel Loose piece Reel Loose piece Reel Loose piece	47445-000 47747-000 47217-000 47715-000 47649-000 47750-000	48242-000 48251-000 48245-000 48254-000 48248-000 48257-000	48049-000 48235-000 48046-000 48234-000 48051-000 48236-000	47457-000 47743-000 47439-000 47712-000 47565-000 47745-000		
28, 30, 32 or Two 30 or Two 32	0.71--1.37 mm (0.028--0.054 in.)	Standard Standard High High Ultra-high Ultra-high	Reel Loose piece Reel Loose piece Reel Loose piece	47446-000* 47748-000* 47213-000* 47714-000* 47650-000* 47751-000*	48243-000* 48252-000* 48246-000* 48255-000* 48249-000* 48258-000	48048-000* 48238-000* 48045-000* 48237-000* 48050-000* 48239-000*	47456-000* 47742-000* 47437-000* 47711-000* 47564-000* 47744-000*		
32, 34, 36	0.51--1.02 mm (0.020--0.040 in.)	Standard Standard High High Ultra-high Ultra-high	Reel Loose piece Reel Loose piece Reel Loose piece	75543-009* 75543-010* 75543-007* 75543-008* 75543-011* 75543-012*	--- --- --- --- --- ---	75543-015* 75543-016* 75543-013* 75543-014* 75543-017* 75543-018*	75543-003* 75543-004* 75543-001* 75543-002* 75543-005* 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.

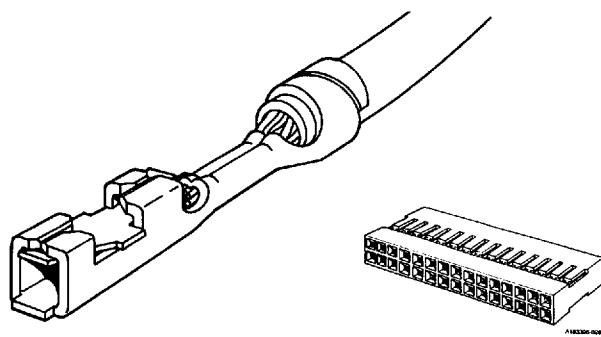
Customer Support Materials

Description	Order No.	Description	Order No.
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

Approvals and Certifications

 File no. E66906

 File no. LR46923

Specifications

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

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

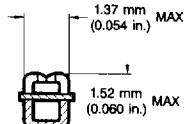
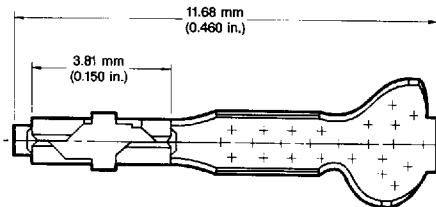
Operating Environment

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

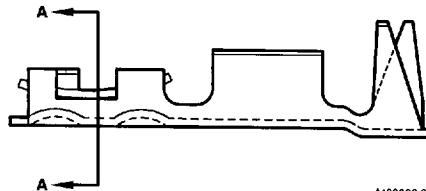
Packaging

- Reels
- Boxes (loose piece)

Description



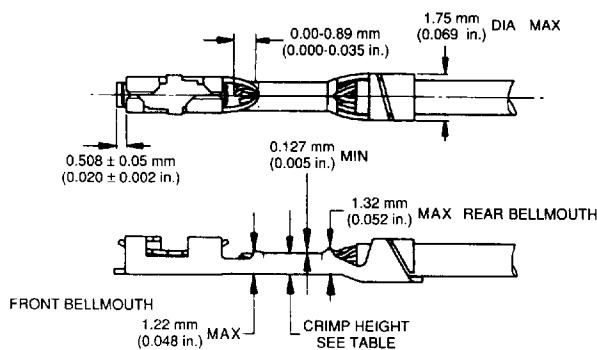
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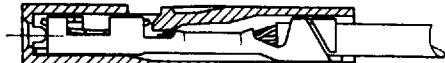
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Crimping Specifications

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.)