# AMPINNERGY Wire-To-Board Connectors

### **Product Facts**

- Ratings: 600 VAC (RMS), current ratings range from 12-35 Amps
- Receptacles polarized to plug
- Receptacles and plugs available in contact configurations of 2 through 8 positions
- Vertical receptacle polarized to PCB
- Receptacle contacts have dual solder posts for efficient heat dissipation, low millivolt drop and mechanical strength
- Receptacles may be mounted on PCBs .062 to .125 inch thick
- Plugs have positive latching to receptacles
- Removable crimp contacts latch firmly in plug
- Plugs are one-piece design
- Two ranges of crimped contacts accommodate either 10-12 AWG or 14-16-18 AWG conductors
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189-239

### **Technical Documents**

Product Specification 108-1349 AMPINNERGY WTB Connectors

Application Specification 114-6044 AMPINNERGY WTB Connectors

#### **Instruction Sheets**

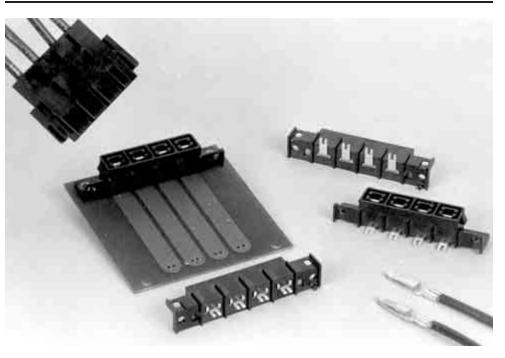
408-3236 Installation of AMPINNERGY WTB Connectors 408-3198 Inspection of AMPINNERGY Contacts



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#### AMPINNERGY Wire-To-Board (WTB) Connectors

Connectors provide a convenient and efficient means of delivering up to 600 VAC to component printed circuit boards and other power distribution devices in computers and peripherals, telephone systems and appliances. The WTB connectors also have automotive and industrial applications.

#### Receptacles

The AMPINNERGY WTB connector receptacles can be installed on pc boards varying in thickness from .062 inch to .125 inch. A polarizing pin is provided on the vertical receptacle assembly to aid in proper positioning on the pc board. Both the vertical and right-angle assemblies are polarized for accurate mating to the plug assemblies. The receptacle assemblies are available in contact configurations ranging from two to eight positions.

### Plugs

The single piece plug housings are available in contact configurations to mate with the receptacles. The plug is equipped with positive latches to allow full and more secure mating to the respective receptacle.

A make-first/break-last feature is designed into position 1 of the plug assemblies to provide grounding protection.

### Contacts

The crimp contacts will accommodate either 10-12 AWG or 14-16-18 AWG conductors. The contacts latch firmly within the plug housing.

Cable Mounted Products

## **Vertical PCB Receptacles**

**Electronics** 

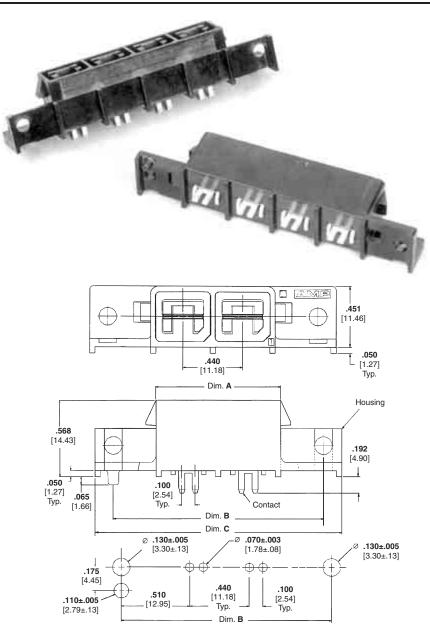
### **Product Facts**

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- Withstands vapor phase, infrared and wave soldering processes
- .040 inch minimum standoff to PCB
- Polarized to PCB; to plug
- Contact centerline spacing: .440 inch
- Overall height on PCB: .600 inch
- Fits PCB thickness .062 through .125 inch
- Contacts have dual solder posts for efficient heat dissipation, low millivolt drop and mechanical strength
- Positive latching to mating plug

### **Material and Finish**

Housing — Polyphenylene Sulfide, Black, 94V-0 Contacts — Tin Plated Copper Alloy



#### PCB Thickness — .062-.125 inch

		No. of	Dimensions			Receptacle
		Positions	A	В	С	Part Numbers
		2	<b>.93</b> 23.50	<b>1.56</b> 39.62	<b>1.84</b> 46.61	556881-2
		3	<b>1.37</b> 34.68	<b>2.00</b> 50.80	<b>2.28</b> 57.79	556881-3
		4	<b>1.81</b> 45.85	<b>2.44</b> 61.98	<b>2.72</b> 68.97	556881-4
		5	<b>2.25</b> 57.03	<b>2.88</b> 73.15	<b>3.16</b> 80.14	556881-5
Thickness — .250 inch		6	<b>2.69</b> 68.20	<b>3.32</b> 84.33	<b>3.60</b> 91.32	556881-6
No. of sitions	Receptacle Part Numbers	7	<b>3.13</b> 79.38	<b>3.76</b> 95.50	<b>4.04</b> 102.49	556881-7
4	558574-1		3.57	4.20	4.48	======
6	558084-1	8	90.56	106.68	113.67	556881-8

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Note: All part numbers are RoHS compliant.

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## Right-Angle PCB Receptacles

**Product Facts** 

- Withstands vapor phase, infrared and wave soldering processes
- .040 inch minimum standoff to PCB
- Receptacles polarized to plug
- Contact centerline spacing: .440 inch
- Overall height on PCB: .600 inch
- Fits PCB thickness .062 through .125 inch
- Contacts have dual solder posts for efficient heat dissipation, low millivolt drop and mechanical strength
- Positive latching to mating plug

### **Material and Finish**

Housing — Polyphenylene Sulfide, Black, 94V-0 Contacts — Tin Plated Copper Alloy

BE .065 Ŧ -11 П .200 [1.66] [5.08] Тур. **.568** [14.43] Dim. A Dim. B Dim. C Housing .440 [11.18] **.501** [12.73] .192 [4.90] Typ. .050 [1.27] **.100** [2.54] Typ. Тур. Contact .100 .200 .510 .440 Ø .063±.003 [2.54] [5.08] [12.95] [11 18] [1.60±.08] Ø .130±.005 [3.30±.13] Ø .130±.005 Dim. B [3.30±.13]

### PCB Thickness — .062-.125 inch

OD THICKNESS	.002 .				
No. of	Dimensions			Receptacle	
Positions	Α	в	С	Part Numbers	
2	<b>.93</b> 23.50	<b>1.56</b> 39.62	<b>1.84</b> 46.61	556882-2	
3	<b>1.37</b> 34.68	<b>2.00</b> 50.80	<b>2.28</b> 57.79	556882-3	
4	<b>1.81</b> 45.85	<b>2.44</b> 61.98	<b>2.72</b> 68.97	556882-4	
5	<b>2.25</b> 57.03	<b>2.88</b> 73.15	<b>3.16</b> 80.14	556882-5	
6	<b>2.69</b> 68.20	<b>3.32</b> 84.33	<b>3.60</b> 91.32	556882-6	
7	<b>3.13</b> 79.38	<b>3.76</b> 95.50	<b>4.04</b> 102.49	556882-7	
8	<b>3.57</b> 90.56	<b>4.20</b> 106.68	<b>4.48</b> 113.67	556882-8	

Note: All part numbers are RoHS compliant.

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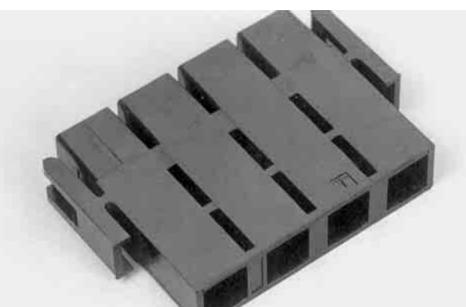
# **Plug Housings**

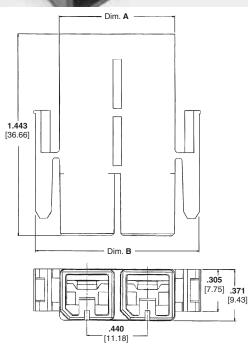
## **Product Facts**

- One-piece housing
- Polarized to mating receptacles
- Positive latching to mating receptacles
- Accepts crimp contacts Part Numbers 556880-2 and 556883-1
- Internal latching of crimp contact

### Material

Housing — Polycarbonate, Black, 94V-0





No. of	Dimer	Plug	
Positions	Α	В	Part Numbers
2	<b>.85</b> 21.42	<b>1.20</b> 30.31	556879-2
3	<b>1.29</b> 32.59	<b>1.64</b> 41.48	556879-3
4	<b>1.73</b> 43.77	<b>2.08</b> 52.66	556879-4
5	<b>2.17</b> 54.94	<b>2.52</b> 63.83	556879-5
6	<b>2.61</b> 77.30	<b>2.96</b> 75.01	556879-6
7	<b>3.05</b> 77.30	<b>3.40</b> 86.19	556879-7
8	<b>3.49</b> 88.47	<b>3.84</b> 97.36	556879-8

Note: All part numbers are RoHS compliant.

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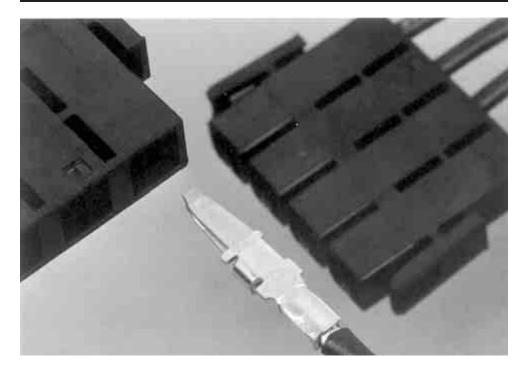
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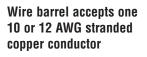
# **Crimp Contacts**

**Product Facts** 

 Contacts are dual beam design

Material and Finish Contacts—Tin Plated Copper Alloy





Part Number 556880-2 Strip Part Number 556880-1 Loose Piece

#### Application Tooling Applicator Part Number

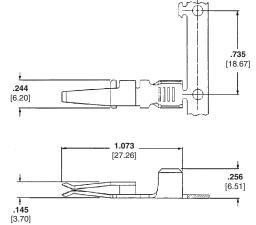
567256-3 (for Lead Makers) 567256-4 (for AMP-O-LECTRIC Model K Machine) 567256-6 (for AMP-O-LECTRIC Model G Machine)

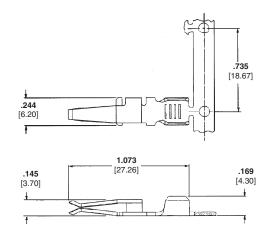
## Wire barrel accepts one 14, 16 or 18 AWG stranded copper conductor

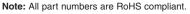
Part Number 556883-1 Loose Piece Part Number 556883-2 Strip

#### **Application Tooling Part Number**

69710-1 Hand Tool 58492-1 Die Set (14 AWG) 58493-1 Die Set (18-16 AWG) 91308-1 Extraction Tool







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