Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

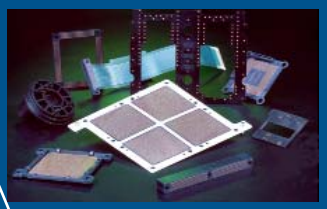
With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

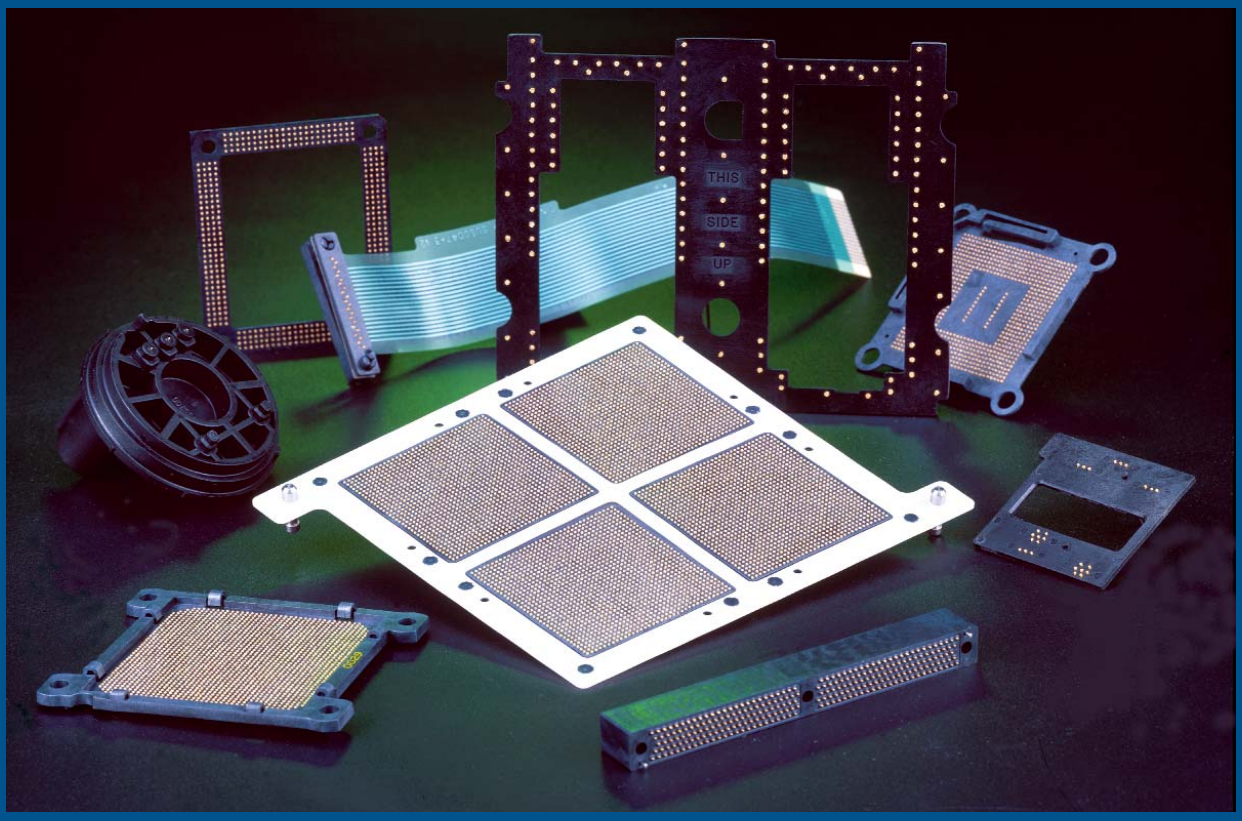
Cinch



Catalog No. C-865

CIN::APSE®

High Speed Interconnect Technology



Cinch

CIN::APSE®

High-Speed Interconnect Technology

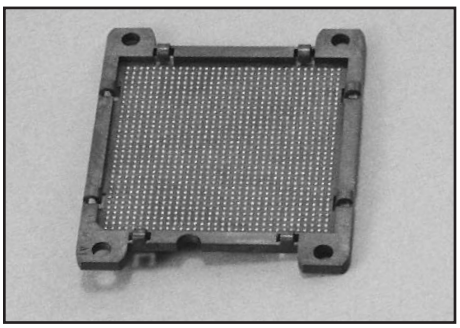
Cinch

Features

- ***High signal speed capability enabling frequencies greater than 20 GHz.***
- ***Z-Axis, solderless, compression mount interconnect system.***
- ***Applications include production Land Grid Array (LGA) integrated circuit sockets, flex circuit to PCB, and parallel PCB to PCB interconnections.***
- ***Provides solutions to many of the problems associated with through hole and surface mount soldered technology.***
- ***Enables upgrade and system maintenance strategies.***
- ***Available in custom I/O configurations and I/O counts from 1 to over 5,000.***
- ***Offers low profile capabilities with compressed signal path length as short as 0.8 mm.***
- ***Contact centerline spacing of 1mm or greater.***
- ***Excellent reliability in commercial, military, and aerospace applications.***
- ***Application can result in lower installed and system maintenance costs.***

Materials

Contact Material: Molybdenum
CIN::APSE Contact Plating: Gold
Plunger Material: Copper alloy
Plunger Plating: Gold
Insulator Material: Liquid crystal polymer
Packaging Tray Material: Anti-static ABS



IC Component to Board Socket (LGA)

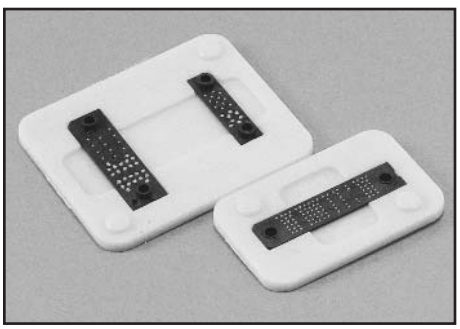
Environmental

Button-Only Configuration with 0.020" (0.5 mm) Diameter
Temperature Life Testing: 1000 Hours @ 200°C
Thermal Shock: 2,000 Cycles @ 20°C to 110°C
Humidity: 5,000 Hours @ 30°C to 80°C, 80% RH
Salt Spray: 96 Hours
Low Temperature: Operates in liquid nitrogen (77°K)
Bellcore TR-NWT-001217: Passed with plungers

Electrical

Button-Only Configuration with 0.020" (0.5 mm) Diameter

DC Resistance:	15mΩ average
Inductance:	Less than 1 nH
Current-Carrying Capability:	Up to 3 Amps.
Insulation Resistance:	25,000 MegΩ @ 500 VDC
Dielectric Withstanding Voltage:	900 VAC at sea level



Flex Circuit to PCB

Mechanical

Button-Only Configuration with 0.020" (0.5 mm) diameter
Durability: 25,000 Z-axis actuations (CIN::APSE contact only)
Shock: 100 Gs; 6 milliseconds, no discontinuity greater than 2 nanoseconds
Vibration: 20 Gs; 10-20,000 Hz; no discontinuity greater than 2 nanoseconds

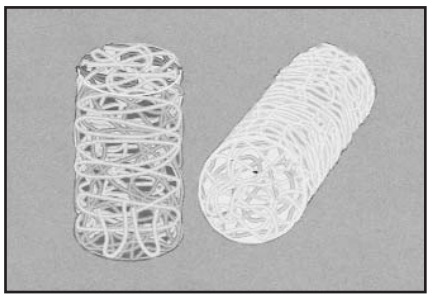
CIN::APSE®

High-Speed Interconnect Technology

Cinch

THE BUTTON CONTACT

The unique construction of the CIN::APSE contact provides superior mechanical and electrical performance. It is constructed of randomly wound molybdenum wire that is formed into a cyclindrical shape. Standard CIN::APSE contact diameters are 0.020" and 0.040".



Mechanical

- Small form factor (0.020" diameter by 0.32" min. high)
- Low compression force (approx. 2.5 oz. min. per contact)
- Multiple beam structures
- Several points of contact per button
- Extremely lightweight
- Natural wiping action

Electrical

- Short signal path
- Very low inductance and resistance
- Signal integrity tested in the GHz range

Typical CIN::APSE Applications

- LGA package I/O to PC board (IC packages, multi-chip modules)
- PC board to PC board (parallel processors, enhancement/mezzanine cards)
- Flex circuit to PC board (rigid flex, harnessing)
- Flex circuit to ceramic (chip to harness)

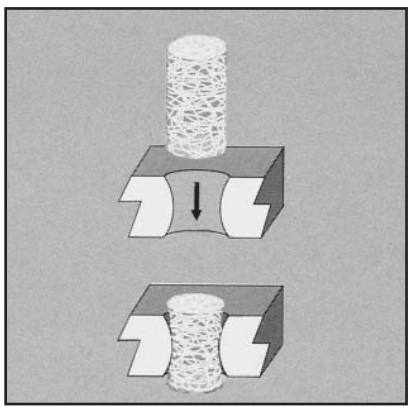
CIN::APSE APPLIED

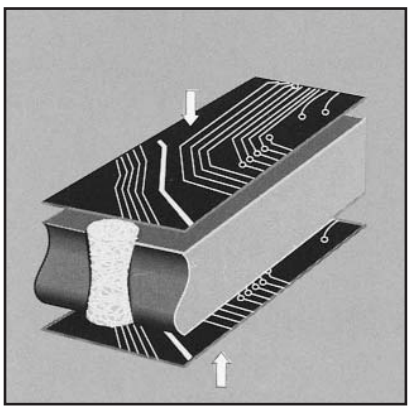
The basic button contact configuration consists of a single button installed in our patented "hourglass" design.

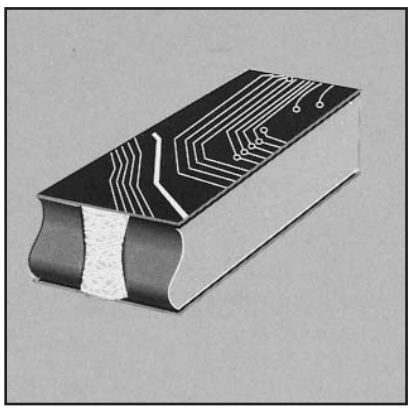
The hourglass cavity retains the CIN::APSE contact securely. Typically 0.003" protrudes from the top and the bottom of the insulator.

Step 1:
Using alignment features, position the CIN::APSE connector between a LGA chip package and PCB or two PCBs that have matching footprints.

Step 2:
Add Z-Axis compression and secure.





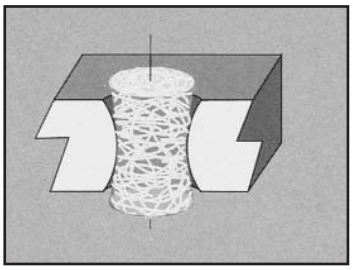


1

TYPICAL CONFIGURATION

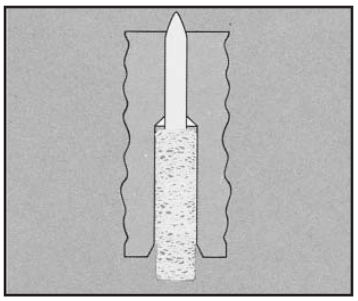
1. Button-Only

This is the basic CIN::APSE contact configuration. It is ideally suited for z-axis applications requiring minimum height, high density, and signal integrity. This configuration is used in LGA and IC sockets, PCB to PCB, and flex print circuit to PCB applications.



2. Plunger-Button

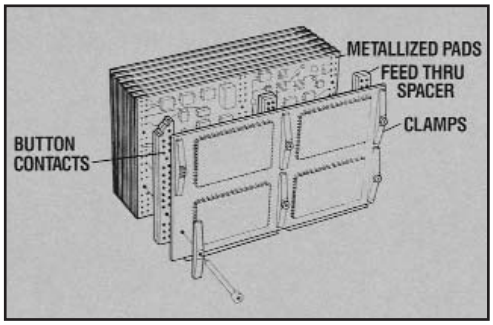
The addition of a gold-plated brass plunger increases the durability of the CIN::APSE contact system while also achieving additional height. This configuration suits itself especially well for PCB to PCB interconnect and those that require excessive handling.

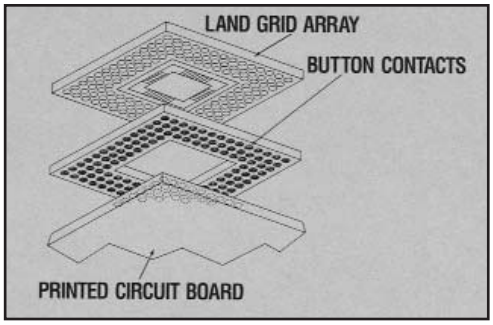


Other custom configurations are available. Contact Cinch for details.

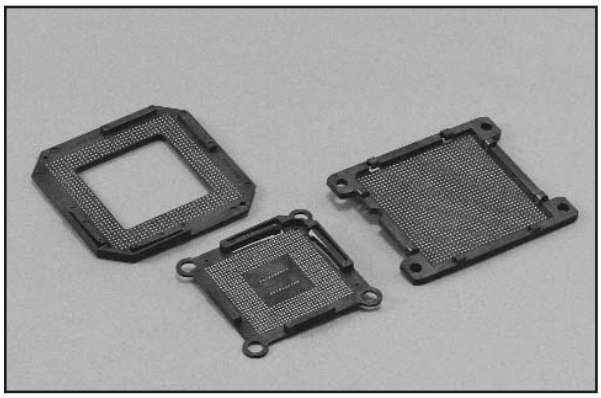
CIN::APSE Applications

Due to its breakthrough nature, it is impossible to illustrate all of the applications CIN::APSE technology can address. The following applications illustrate only a portion of the types of interconnect problems that CIN::APSE can solve.

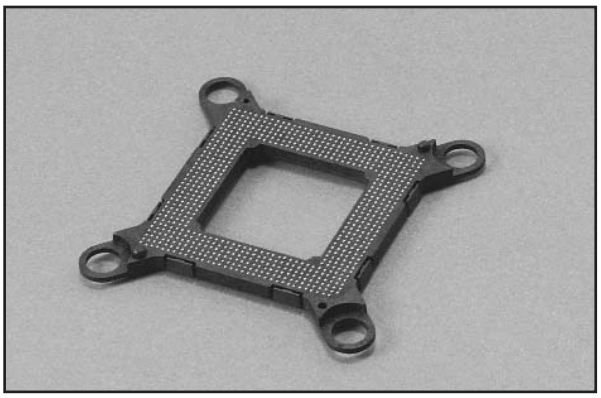




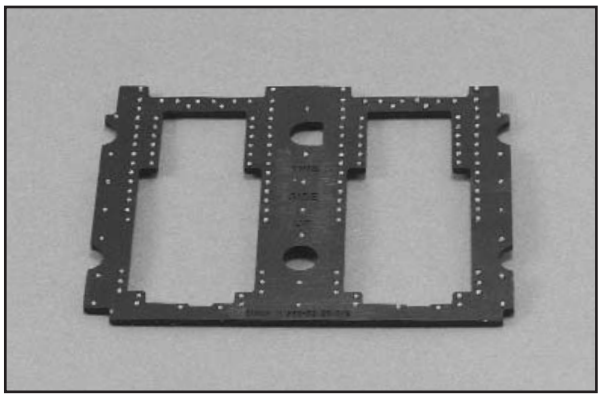
VARIOUS CIN::APSE APPLICATIONS



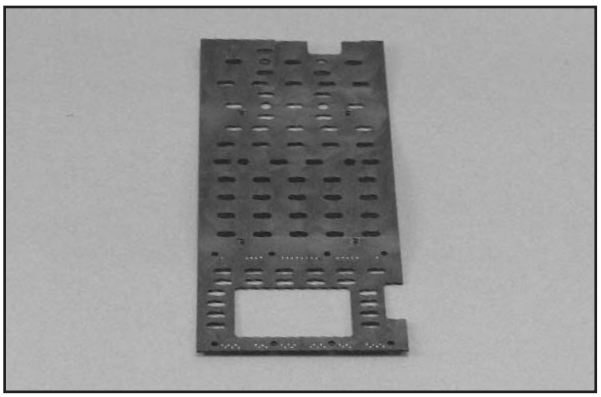
IC Component to Board Socket (LGA)



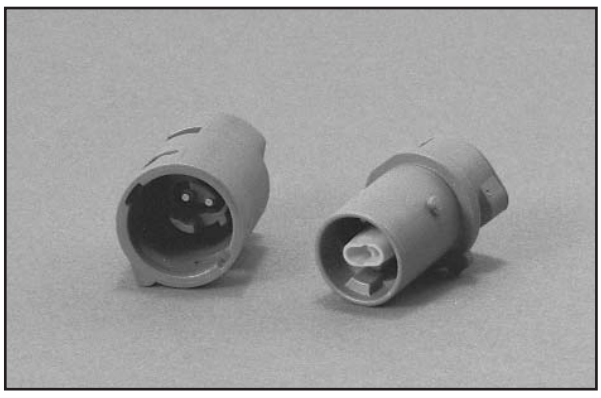
PCB to PCB



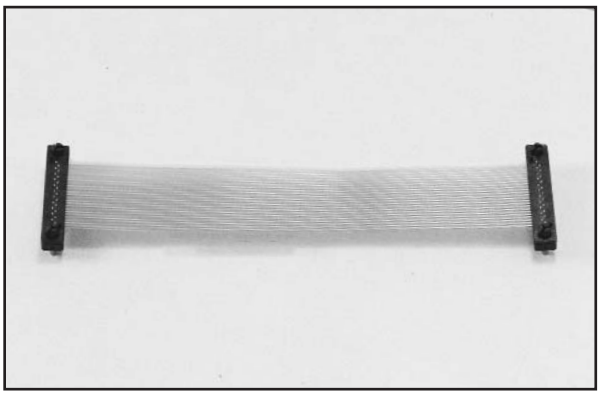
Hybrid Circuit to Flex to PCB



LCD to Flex to PCB



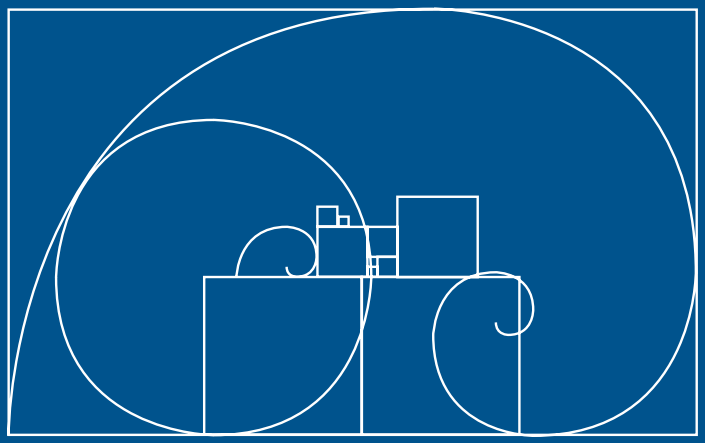
Cable to PCB/Flex



Flex Circuit to PCB

COMMERCIAL

Barrier Blocks
Circular Mini DIN
BNC
Jones Plugs
Edge Connectors



Cinch

Cinch Commercial Products, consisting of Jones Plugs and Sockets, Barrier Blocks, Edge Cards, Two-Piece Commercial Dins, Mini Din Plugs, and their newest addition the 75Ω Press-Fit BNC Receptacle, provide a wide variety of connectors for the purchaser and designer to chose from.

The Jones Plugs and Sockets have been utilized for decades and provide a quick, reliable, and economical means of solving your higher current-carrying capacity needs. Available in two series (300 and 2,400), these connectors can be found in data processing controls; amusement and vending machines; medical, communication, and test equipment; as well as industrial controls and heavy-duty, battery-powered equipment. Both series are available in a variety of cable and panel mounting options.

Cinch Barrier Blocks are designed to simplify wiring work by reducing splicing, preventing current leaks and short circuits, and increasing insulation. Available in a variety of densities, these barrier blocks can be found in applications ranging from industrial controls to switching systems.

Designed specially for applications where space is at a premium, the Cinch Mini Din family is ideal for personal computers, keyboard-mouse interface, hand-held electronic equipment, office-automation equipment, and audio and video equipment. Available in sizes 3 through 8 contact, the Cinch Mini Din family includes a fully shielded cable mounted plug in various cable lengths or cable mounted plug components for customers with high-volume assembly and overmold capabilities.

Cinch Edge Card Connectors are available in a variety of styles on both .100 or .156 center spacing.

The newest addition to the commercial family, the 75Ω Press-Fit BNC Receptacle is designed around a unique patented press-fit design that allows for multiple insertion into a backplane without loss of mechanical retention or electrical performance.

When looking for time reliability to solve your commercial interconnect needs, look no further than Cinch Connectors. Whether it's a Jones Plug and Socket, Barrier Block, Edge Card, Mini Din plug, or our newest addition, the 75Ω BNC Press-Fit connector, you will always know years of customer satisfaction stand behind the product you chose.

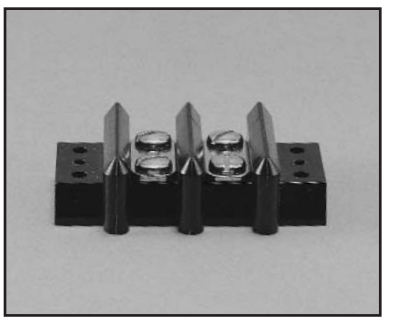
Cinch

Features

- ***Interposing barriers between terminals yield higher electrical ratings and provide additional protection against frayed wire shorting.***
- ***A wide variety of barrier blocks makes it possible to select the combination of mechanical and electrical characteristics that best meet the exact requirements of your application.***
- ***A wide selection of optional terminals and fanning strips permits the equipment designer to choose the method of termination most suitable for his environmental specifications and manufacturing requirements.***

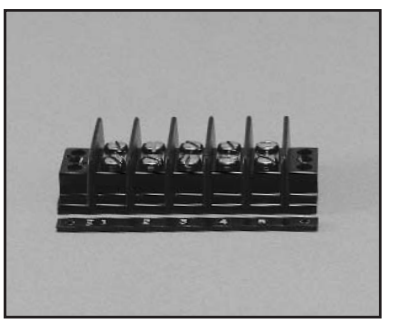
Materials

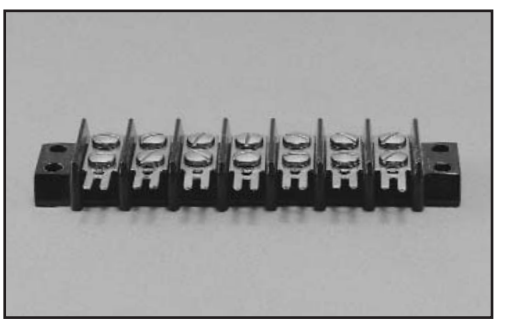
Insulation Material: Molded monoblock, general purpose phenolic, black, UL Rated 94V-1
Eyelets: Material - Brass
Plating - Nickel
Screws: Material - Steel
Plating - Nickel over copper flash
Solder Terminals: Material - Brass
Plating - Electro-Tin
Marker Strip Material: Nema Grade XPC, UL Rated 94V-O

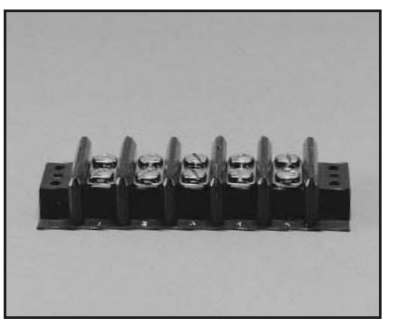


Environmental

Operating Temperature: -55° to +300°F
Certifications: UL Recognized - File E61245
CSA - LR 31996







Marketed exclusively through distribution.

TERMINAL BLOCK QUICK REFERENCE

Series	Center-to-Center Spacing	Number of Terminals	Single or Double Row	Screw Size	Operating Voltage	Current Rating	Max. Wire Size	Max. Watts/ Terminal	Voltage Rating w/Marker	Voltage Rating w/o Marker	Marker Strip Mounting
140	.375	1-25	Double	5-40	250 Volts	15 Amps	#16	3750	2000	1100	Bottom
141	.438	1-20	Double	6-32	250 Volts	20 Amps	#14	5000	2400	1100	Bottom
142	.563	1-17	Double	8-32	250 Volts	30 Amps	#10	7500	2600	1600	Bottom
150	.688	1-10	Double	10-32	250 Volts	40 Amps	#10	10,000	2400	1500	Bottom
151	.875	1-8	Double	12-32	250 Volts	50 Amps	#8	12,500	3400	1800	Bottom
152	1.125	1-6	Double	1/4-28	250 Volts	70 Amps	#6	54,000	3800	2100	Bottom
164	.375	1-21	Double	6-32	250 Volts	15 Amps	#14	3750	2000	1100	Bottom
540	.375	2-31	Double	5-40	600 Volts	15 Amps	#16	3750	2300	2300	Top
541	.438	2-30	Double	6-32	600 Volts	20 Amps	#14	5000	2800	2800	Top
542	.563	2-26	Double	8-32	600 Volts	30 Amps	#10	7500	4000	4000	Top
176	.375	2-10	Single	5-40	250 Volts	15 Amps	#16	3750	N/A	1100	N/A

.375 Density, 5-40 x 3/16" BH Screw, Open Bottom, Double Row

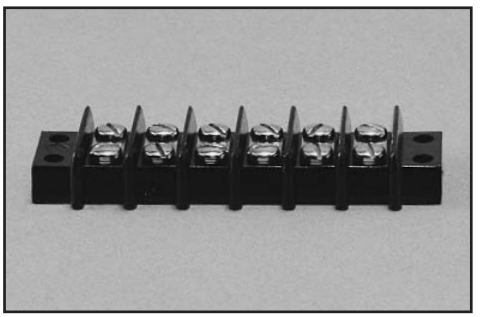
Cinch

Electrical Characteristics

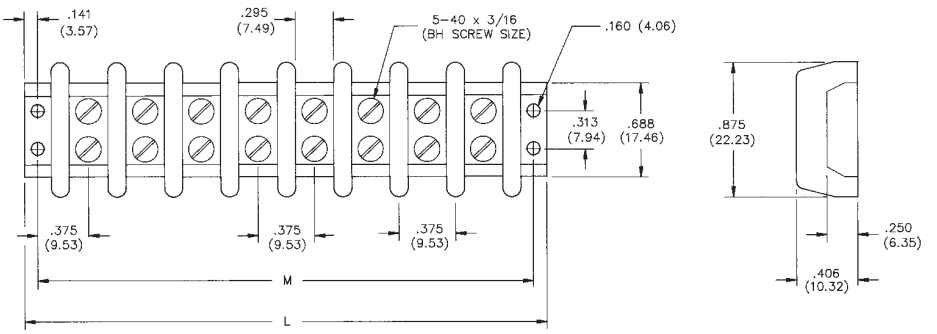
Voltage Rating: 250 VAC RMS maximum
Current Rating: 15 Amps maximum
Maximum Watts Per Terminal: 3750

Mechanical Characteristics

Maximum Wire Size: #16 AWG
Recommended Tightening Torque: 9 lb.-in.



Dimensions



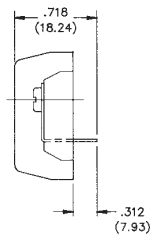
Ordering Information

No. of Terminals	Standard Screw Catalog No.	"M" Dim.	"L" Dim.
1	1-140	.750	1.032
2	2-140	1.125	1.407
3	3-140	1.500	1.782
4	4-140	1.875	2.157
5	5-140	2.250	2.532
6	6-140	2.625	2.907
7	7-140	3.000	3.282
8	8-140	3.375	3.657
9	9-140	3.750	4.032
10	10-140	4.125	4.407
11	11-140	4.500	4.782
12	12-140	4.875	5.157
13	13-140	5.250	5.532
14	14-140	5.625	5.907
15	15-140	6.000	6.282
16	16-140	6.375	6.657
17	17-140	6.750	7.032
18	18-140	7.125	7.407
19	19-140	7.500	7.782
20	20-140	7.875	8.157
21	21-140	8.250	8.532
22	22-140	8.625	8.907
23	23-140	9.000	9.282
24	24-140	9.375	9.657
25	25-140	9.750	10.032

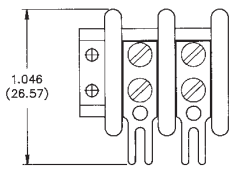
Solder Terminal Options

Dimensions

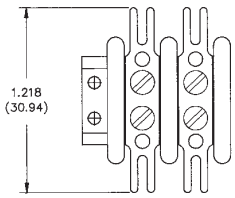
"Y" Terminals



"3/4W" Terminals



"W" Terminals



Ordering Information

No. of Terminals	Catalog No.	Catalog No.	Catalog No.
1	1-140-Y	1-140-3/4W	1-140-W
2	2-140-Y	2-140-3/4W	2-140-W
3	3-140-Y	3-140-3/4W	3-140-W
4	4-140-Y	4-140-3/4W	4-140-W
5	5-140-Y	5-140-3/4W	5-140-W
6	6-140-Y	6-140-3/4W	6-140-W
7	7-140-Y	7-140-3/4W	7-140-W
8	8-140-Y	8-140-3/4W	8-140-W
9	9-140-Y	9-140-3/4W	9-140-W
10	10-140-Y	10-140-3/4W	10-140-W
11	11-140-Y	11-140-3/4W	11-140-W
12	12-140-Y	12-140-3/4W	12-140-W
13	13-140-Y	13-140-3/4W	13-140-W
14	14-140-Y	14-140-3/4W	14-140-W
15	15-140-Y	15-140-3/4W	15-140-W
16	16-140-Y	16-140-3/4W	16-140-W
17	17-140-Y	17-140-3/4W	17-140-W
18	18-140-Y	18-140-3/4W	18-140-W
19	19-140-Y	19-140-3/4W	19-140-W
20	20-140-Y	20-140-3/4W	20-140-W
21	21-140-Y	21-140-3/4W	21-140-W
22	22-140-Y	22-140-3/4W	22-140-W
23	23-140-Y	23-140-3/4W	23-140-W
24	24-140-Y	24-140-3/4W	24-140-W
25	25-140-Y	25-140-3/4W	25-140-W

Solder Terminals can be ordered separately.

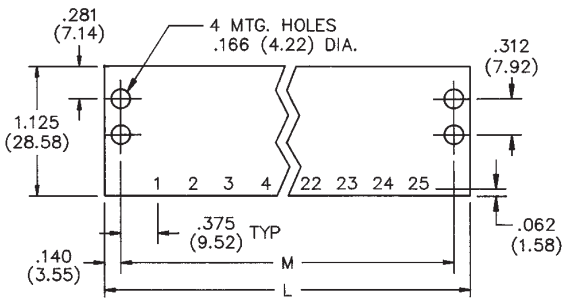
Terminal Type	Catalog No.
"Y"	Y-140
"3/4W"	3/4W-140
"W"	W-140

Marketed exclusively through distribution.

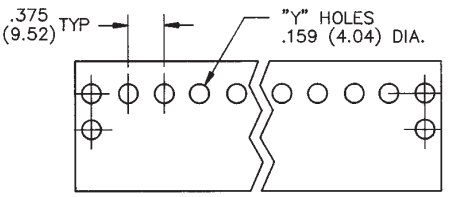
Marker Strips

Dimensions

Standard



"Y" Terminal



Ordering Information

No. of Terminals	Catalog No.	Catalog No.
1	MS-1-140	MS-1-140-Y
2	MS-2-140	MS-2-140-Y
3	MS-3-140	MS-3-140-Y
4	MS-4-140	MS-4-140-Y
5	MS-5-140	MS-5-140-Y
6	MS-6-140	MS-6-140-Y
7	MS-7-140	MS-7-140-Y
8	MS-8-140	MS-8-140-Y
9	MS-9-140	MS-9-140-Y
10	MS-10-140	MS-10-140-Y
11	MS-11-140	MS-11-140-Y
12	MS-12-140	MS-12-140-Y
13	MS-13-140	MS-13-140-Y
14	MS-14-140	MS-14-140-Y
15	MS-15-140	MS-15-140-Y
16	MS-16-140	MS-16-140-Y
17	MS-17-140	MS-17-140-Y
18	MS-18-140	MS-18-140-Y
19	MS-19-140	MS-19-140-Y
20	MS-20-140	MS-20-140-Y
21	MS-21-140	MS-21-140-Y
22	MS-22-140	MS-22-140-Y
23	MS-23-140	MS-23-140-Y
24	MS-24-140	MS-24-140-Y
25	MS-25-140	MS-25-140-Y

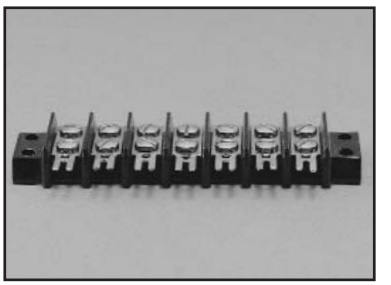
Use Standard Marker Strips for "3/4W" and "W" Solder Terminals.

Accessories

- Jumpers
- Fanning Strips

Marketed exclusively through distribution.

.438 Density, 6-32 x 1/4" BH Screw, Open Bottom, Double Row



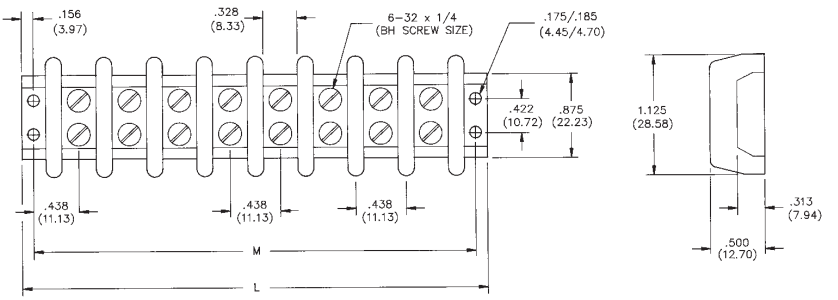
Electrical Characteristics

Voltage Rating: 250 VAC RMS maximum
Current Rating: 20 Amps maximum
Maximum Watts Per Terminal: 5000

Mechanical Characteristics

Maximum Wire Size: #14 AWG
Recommended Tightening Torque: 12 lb.-in.

Dimensions



Ordering Information

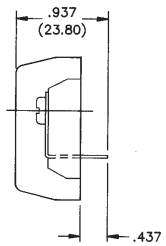
No. of Terminals	Standard Screw Catalog No.	"M" Dim.	"L" Dim.
1	1-141	.875	1.187
2	2-141	1.312	1.625
3	3-141	1.750	2.062
4	4-141	2.187	2.500
5	5-141	2.625	2.938
6	6-141	3.062	3.375
7	7-141	3.500	3.812
8	8-141	3.938	4.250
9	9-141	4.375	4.687
10	10-141	4.813	5.125
11	11-141	5.250	5.562
12	12-141	5.687	6.000
13	13-141	6.125	6.437
14	14-141	6.562	6.875
15	15-141	7.000	7.312
16	16-141	7.437	7.750
17	17-141	7.875	8.187
18	18-141	8.312	8.625
19	19-141	8.750	9.062
20	20-141	9.187	9.500

Marketed exclusively through distribution.

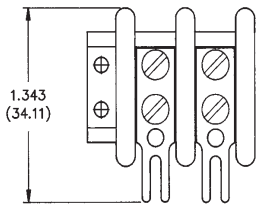
Solder Terminal Options

Dimensions

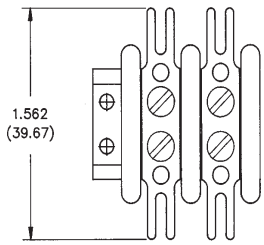
"Y" Terminals



"3/4W" Terminals



"W" Terminals



Ordering Information

No. of Terminals	Catalog No.	Catalog No.	Catalog No.
1	1-141-Y	1-141-3/4W	1-141-W
2	2-141-Y	2-141-3/4W	2-141-W
3	3-141-Y	3-141-3/4W	3-141-W
4	4-141-Y	4-141-3/4W	4-141-W
5	5-141-Y	5-141-3/4W	5-141-W
6	6-141-Y	6-141-3/4W	6-141-W
7	7-141-Y	7-141-3/4W	7-141-W
8	8-141-Y	8-141-3/4W	8-141-W
9	9-141-Y	9-141-3/4W	9-141-W
10	10-141-Y	10-141-3/4W	10-141-W
11	11-141-Y	11-141-3/4W	11-141-W
12	12-141-Y	12-141-3/4W	12-141-W
13	13-141-Y	13-141-3/4W	13-141-W
14	14-141-Y	14-141-3/4W	14-141-W
15	15-141-Y	15-141-3/4W	15-141-W
16	16-141-Y	16-141-3/4W	16-141-W
17	17-141-Y	17-141-3/4W	17-141-W
18	18-141-Y	18-141-3/4W	18-141-W
19	19-141-Y	19-141-3/4W	19-141-W
20	20-141-Y	20-141-3/4W	20-141-W

Solder Terminals can be ordered separately.

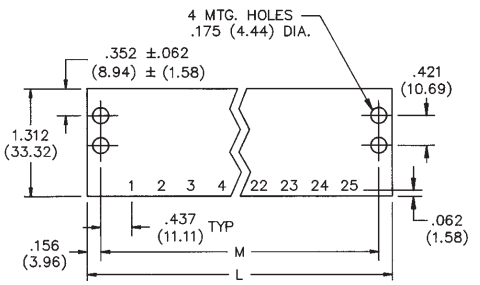
Terminal Type	Catalog No.
"Y"	Y-141
"3/4W"	3/4W-141
"W"	W-141

Marketed exclusively through distribution.

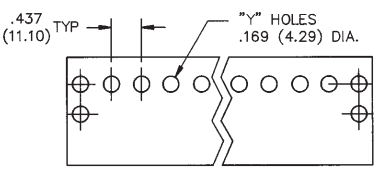
Marker Strips

Dimensions

Standard



"Y" Terminal



Ordering Information

No. of Terminals	Catalog No.	Catalog No.
1	MS-1-141	MS-1-141-Y
2	MS-2-141	MS-2-141-Y
3	MS-3-141	MS-3-141-Y
4	MS-4-141	MS-4-141-Y
5	MS-5-141	MS-5-141-Y
6	MS-6-141	MS-6-141-Y
7	MS-7-141	MS-7-141-Y
8	MS-8-141	MS-8-141-Y
9	MS-9-141	MS-9-141-Y
10	MS-10-141	MS-10-141-Y
11	MS-11-141	MS-11-141-Y
12	MS-12-141	MS-12-141-Y
13	MS-13-141	MS-13-141-Y
14	MS-14-141	MS-14-141-Y
15	MS-15-141	MS-15-141-Y
16	MS-16-141	MS-16-141-Y
17	MS-17-141	MS-17-141-Y
18	MS-18-141	MS-18-141-Y
19	MS-19-141	MS-19-141-Y
20	MS-20-141	MS-20-141-Y

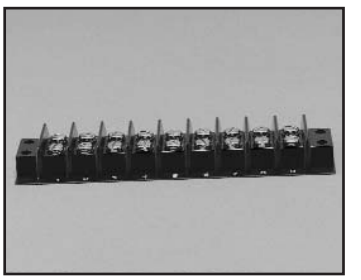
Use Standard Marker Strip for "3/4W" and "W" Solder Terminals.

Accessories

- Jumpers
- Fanning Strips

Marketed exclusively through distribution.

.563 Density, 8-32 x 5/16" BH Screw, Open Bottom, Double Row



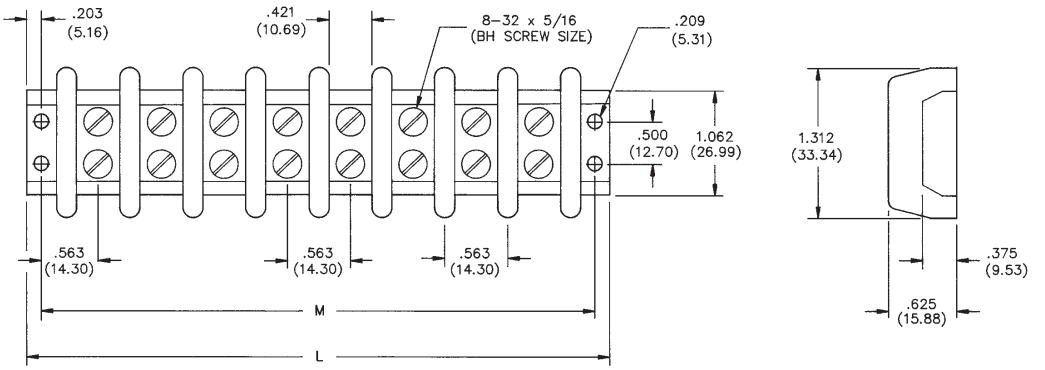
Electrical Characteristics

Voltage Rating: 250 VAC RMS maximum
Current Rating: 30 Amps maximum
Maximum Watts Per Terminal: 7500

Mechanical Characteristics

Maximum Wire Size: #10 AWG
Recommended Tightening Torque: 16 lb.-in.

Dimensions



Ordering Information

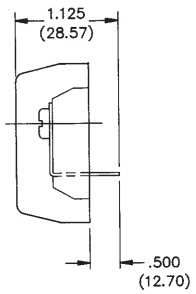
No. of Terminals	Standard Screw Catalog No.	"M" Dim.	"L" Dim.
1	1-142	1.125	1.531
2	2-142	1.687	2.094
3	3-142	2.250	2.656
4	4-142	2.812	3.219
5	5-142	3.375	3.781
6	6-142	3.937	4.344
7	7-142	4.500	4.906
8	8-142	5.062	5.468
9	9-142	5.625	6.031
10	10-142	6.187	6.594
11	11-142	6.750	7.156
12	12-142	7.312	7.719
13	13-142	7.875	8.281
14	14-142	8.437	8.844
15	15-142	9.000	9.406
16	16-142	9.562	9.969
17	17-142	10.125	10.531

Marketed exclusively through distribution.

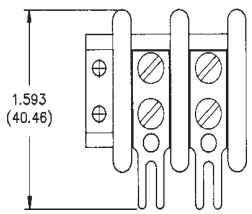
Solder Terminal Options

Dimensions

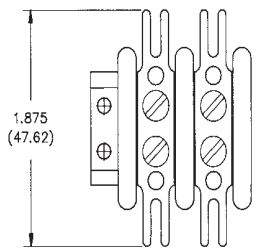
"Y" Terminals



"3/4W" Terminals



"W" Terminals



Ordering Information

No. of Terminals	Catalog No.	Catalog No.	Catalog No.
1	1-142-Y	1-142-3/4W	1-142-W
2	2-142-Y	2-142-3/4W	2-142-W
3	3-142-Y	3-142-3/4W	3-142-W
4	4-142-Y	4-142-3/4W	4-142-W
5	5-142-Y	5-142-3/4W	5-142-W
6	6-142-Y	6-142-3/4W	6-142-W
7	7-142-Y	7-142-3/4W	7-142-W
8	8-142-Y	8-142-3/4W	8-142-W
9	9-142-Y	9-142-3/4W	9-142-W
10	10-142-Y	10-142-3/4W	10-142-W
11	11-142-Y	11-142-3/4W	11-142-W
12	12-142-Y	12-142-3/4W	12-142-W
13	13-142-Y	13-142-3/4W	13-142-W
14	14-142-Y	14-142-3/4W	14-142-W
15	15-142-Y	15-142-3/4W	15-142-W
16	16-142-Y	16-142-3/4W	16-142-W
17	17-142-Y	17-142-3/4W	17-142-W

Solder Terminals can be ordered separately.

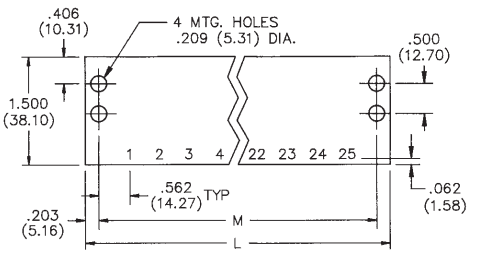
Terminal Type	Catalog No.
"Y"	Y-142
"3/4W"	3/4W-142
"W"	W-142

Marketed exclusively through distribution.

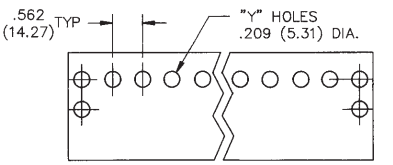
Marker Strips

Dimensions

Standard



"Y" Terminal



Ordering Information

No. of Terminals	Catalog No.	Catalog No.
1	MS-1-142	MS-1-142-Y
2	MS-2-142	MS-2-142-Y
3	MS-3-142	MS-3-142-Y
4	MS-4-142	MS-4-142-Y
5	MS-5-142	MS-5-142-Y
6	MS-6-142	MS-6-142-Y
7	MS-7-142	MS-7-142-Y
8	MS-8-142	MS-8-142-Y
9	MS-9-142	MS-9-142-Y
10	MS-10-142	MS-10-142-Y
11	MS-11-142	MS-11-142-Y
12	MS-12-142	MS-12-142-Y
13	MS-13-142	MS-13-142-Y
14	MS-14-142	MS-14-142-Y
15	MS-15-142	MS-15-142-Y
16	MS-16-142	MS-16-142-Y
17	MS-17-142	MS-17-142-Y

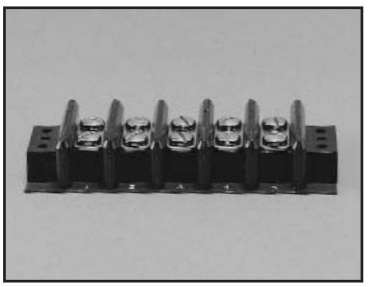
Use Standard Marker Strips for "3/4W" and "W" Solder Terminals.

Accessories

- Jumpers
- Fanning Strips

Marketed exclusively through distribution.

.688 Density, 10-32 x 5/16" BH Screw, Open Bottom, Double Row



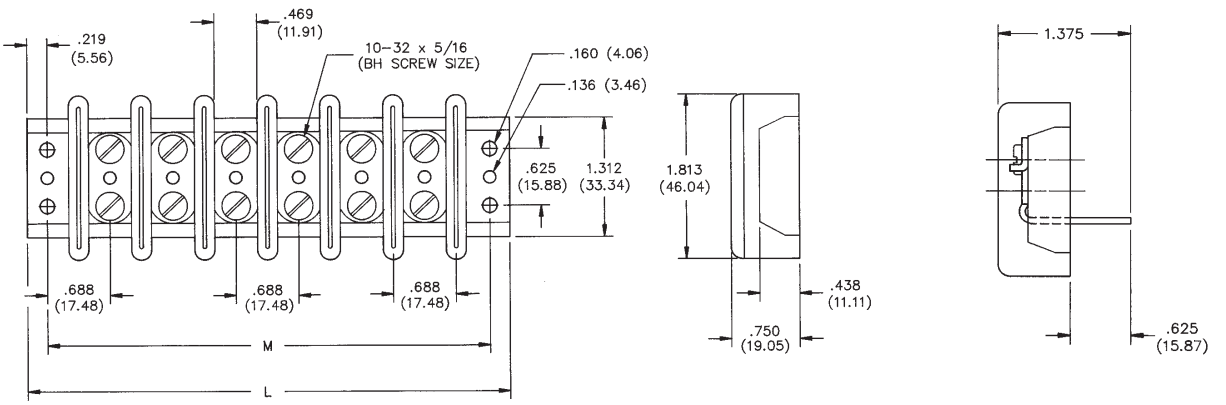
Electrical Characteristics

Voltage Rating: 250 VAC RMS maximum
Current Rating: 40 Amps maximum
Maximum Watts Per Terminal: 10,000

Mechanical Characteristics

Maximum Wire Size: #10 AWG
Recommended Tightening Torque: 20 lb.-in.

Dimensions



Ordering Information

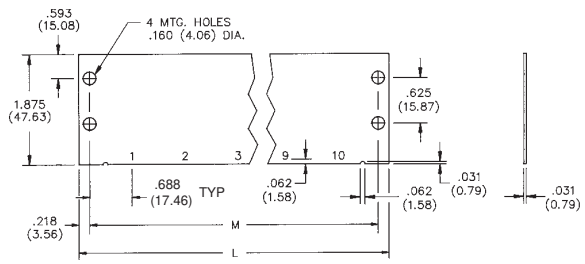
No. of Terminals	Standard Screw Catalog No.	Y-Terminals Catalog No.	"M" Dim.	"L" Dim.
1	1-150	1-150-Y	1.375	1.812
2	2-150	2-150-Y	2.062	2.500
3	3-150	3-150-Y	2.750	3.187
4	4-150	4-150-Y	3.437	3.875
5	5-150	5-150-Y	4.125	4.562
6	6-150	6-150-Y	4.812	5.250
7	7-150	7-150-Y	5.500	5.938
8	8-150	8-150-Y	6.187	6.625
9	9-150	9-150-Y	6.875	7.312
10	10-150	10-150-Y	7.562	8.000

Marketed exclusively through distribution.

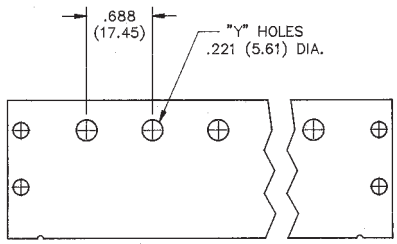
Marker Strips

Dimensions

Standard



"Y" Terminal



Ordering Information

No. of Terminals	Catalog No.	Catalog No.
1	MS-1-150	MS-1-150-Y
2	MS-2-150	MS-2-150-Y
3	MS-3-150	MS-3-150-Y
4	MS-4-150	MS-4-150-Y
5	MS-5-150	MS-5-150-Y
6	MS-6-150	MS-6-150-Y
7	MS-7-150	MS-7-150-Y
8	MS-8-150	MS-8-150-Y
9	MS-9-150	MS-9-150-Y
10	MS-10-150	MS-10-150-Y

Accessories

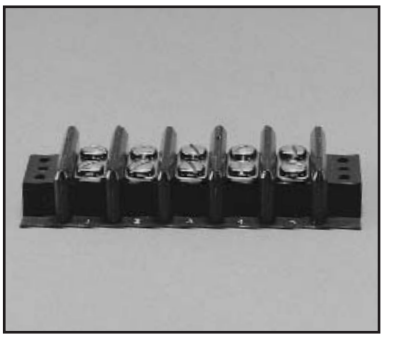
None Available for 150 Series.

Marketed exclusively through distribution.

.875 Density, 12-32 x 3/8" BH Screw, Open Bottom, Double Row

Electrical Characteristics

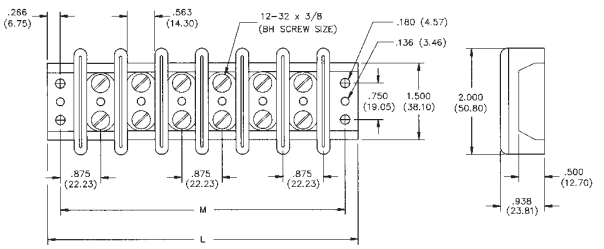
Voltage Rating: 250 Volts maximum
Current Rating: 50 Amps maximum
Maximum Watts Per Terminal: 12,500

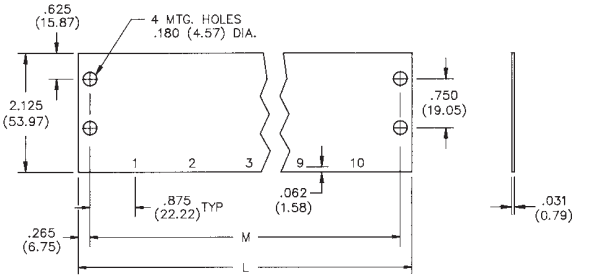


Mechanical Characteristics

Maximum Wire Size: #8
Recommended Tightening Torque: 40 lb.-in.

Dimensions





Ordering Information

No. of Terminals	Catalog No.	"M" Dim. (in)	"L" Dim. (in)	Marker Strip Catalog No.
1	1-151	1.750	2.282	N/A
2	2-151	2.625	3.157	MS-2-151
3	3-151	3.500	4.032	MS-3-151
4	4-151	4.375	4.907	MS-4-151
5	5-151	5.250	5.782	MS-5-151
6	6-151	6.125	6.657	MS-6-151
7	7-151	7.000	7.532	MS-7-151
8	8-151	7.875	8.407	MS-8-151

Solder Terminals can be ordered separately.

Terminal Type	Catalog No.
"W"	W-151

Marketed exclusively through distribution.

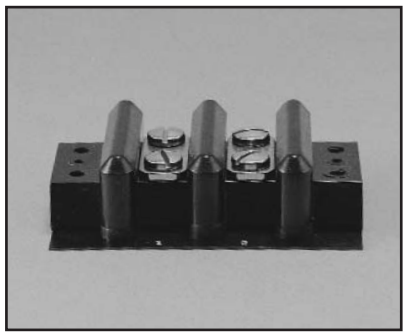
1.25 Density, 1/4-28 x 1/2" BH Screw, Open Bottom, Double Row

Electrical Characteristics

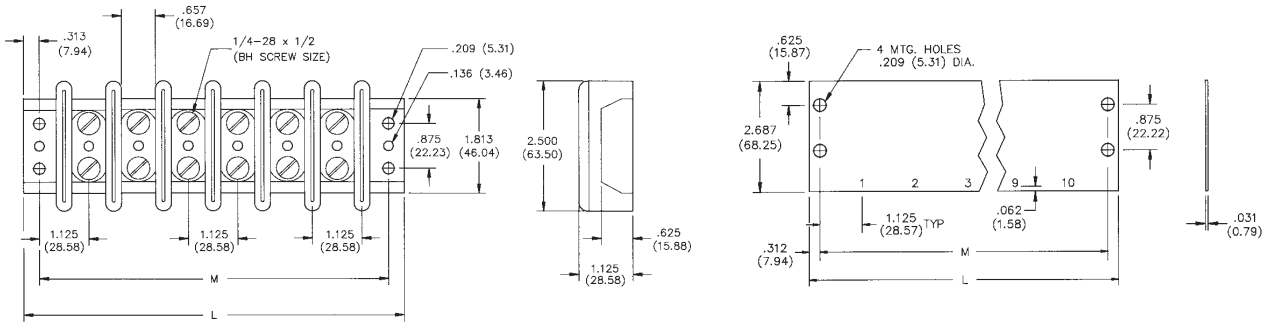
Voltage Rating: 250 Volts maximum
Current Rating: 70 Amps maximum
Maximum Watts Per Terminal: 54,000

Mechanical Characteristics

Maximum Wire Size: #6
Recommended Tightening Torque: 75 lb.-in.



Dimensions



Ordering Information

No. of Terminals	Catalog No.	"M" Dim. (in)	"L" Dim. (in)	Marker Strip Catalog No.
1	1-152	2.250	2.876	N/A
2	2-152	3.375	4.001	MS-2-152
3	3-152	4.500	5.126	MS-3-152
4	4-152	5.625	6.251	MS-4-152
5	5-152	6.750	7.376	MS-5-152
6	6-152	7.875	8.501	MS-6-152

Accessories

None Available for 152 Series.

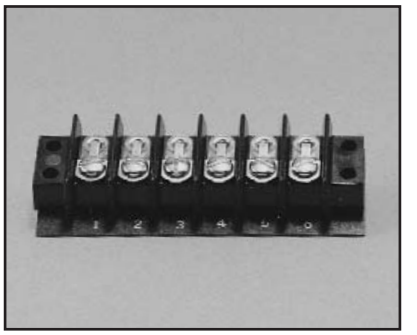
Marketed exclusively through distribution.

Call Toll Free: 1 (800) 323-9612

.375 Density, 6-32 x 5/16" BH Screw, Open Bottom, Double Row

Electrical Characteristics

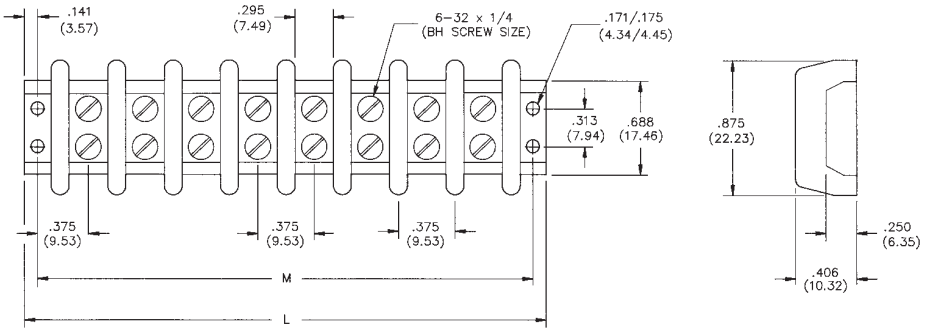
Voltage Rating: 250 Volts maximum
Current Rating: 15 Amps maximum
Maximum Watts Per Terminal: 3750



Mechanical Characteristics

Maximum Wire Size: #14
Recommended Tightening Torque: 12 lb.-in.

Dimensions



Ordering Information

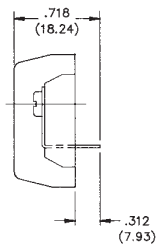
No. of Terminals	Catalog No.	"M" Dim. (in)	"L" Dim. (in)
1	1-164	0.750	1.032
2	2-164	1.125	1.407
3	3-164	1.500	1.782
4	4-164	1.875	2.157
5	5-164	2.250	2.532
6	6-164	2.625	2.907
7	7-164	3.000	3.282
8	8-164	3.375	3.657
9	9-164	3.750	4.032
10	10-164	4.125	4.407
11	11-164	4.500	4.782
12	12-164	4.875	5.157
13	13-164	5.250	5.532
14	14-164	5.625	5.907
15	15-164	6.000	6.282
16	16-164	6.375	6.657
17	17-164	6.750	7.032
18	18-164	7.125	7.407
19	19-164	7.500	7.782
20	20-164	7.875	8.157
21	21-164	8.250	8.532

Marketed exclusively through distribution.

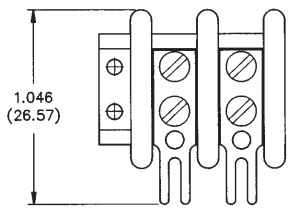
Solder Terminal Options

Dimensions

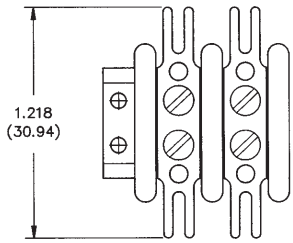
"Y" Terminals



"3/4W" Terminals



"W" Terminals



Ordering Information

No. of Terminals	Catalog No.	Catalog No.	Catalog No.
1	1-164-Y	1-164-3/4W	1-164-W
2	2-164-Y	2-164-3/4W	2-164-W
3	3-164-Y	3-164-3/4W	3-164-W
4	4-164-Y	4-164-3/4W	4-164-W
5	5-164-Y	5-164-3/4W	5-164-W
6	6-164-Y	6-164-3/4W	6-164-W
7	7-164-Y	7-164-3/4W	7-164-W
8	8-164-Y	8-164-3/4W	8-164-W
9	9-164-Y	9-164-3/4W	9-164-W
10	10-164-Y	10-164-3/4W	10-164-W
11	11-164-Y	11-164-3/4W	11-164-W
12	12-164-Y	12-164-3/4W	12-164-W
13	13-164-Y	13-164-3/4W	13-164-W
14	14-164-Y	14-164-3/4W	14-164-W
15	15-164-Y	15-164-3/4W	15-164-W
16	16-164-Y	16-164-3/4W	16-164-W
17	17-164-Y	17-164-3/4W	17-164-W
18	18-164-Y	18-164-3/4W	18-164-W
19	19-164-Y	19-164-3/4W	19-164-W
20	20-164-Y	20-164-3/4W	20-164-W
21	21-164-Y	21-164-3/4W	21-164-W