

# 812 serial Connector

# Amphenol



## Part Number: 842812-xxxx-xxxx

- 812 serial IDC Socket connector can be used where quick connect and disconnect capability are required, Termination is fast and simple by means of IDC technology, Available in size from 10 to 64 contacts with or without mild-in center polarizing key, Strain relief may be added to reduce strain on cable when removing connector.

## A. FEATURES & BENEFITS :

- ◆ MIL-C-83503, BT224, IEC603-13 and BS9525-F0023 compatible.
- ◆ .100" x .100" ( 2.54mm x 2.54mm ) grid.
- ◆ One step mass termination with no wire preparation.
- ◆ Double depth slots for polarization ( except 10 & 14 contact sizes ).
- ◆ The mold-in CPK ( center polarizing key ) option is available.
- ◆ The accessories of optional CPK, polarizing plug and strain relief are available.
- ◆ Selective gold plated contacts.
- ◆ Various copper alloy options for contact material.
- ◆ Ribbed cover for correct cable alignment.
- ◆ Open-end cover for feed-through and daisy-chain application.
- ◆ CEC ( Close Entry Cover ) to shield the cable end exposure and to prevent any wrong direction entry.
- ◆ UL and CSA Approved.
- ◆ Standard color grey only.
- ◆ Various packaging options for ease of termination and handling.
- ◆ Mate with 0.025" square pins male header and Amphenol header of 816, 821 & 822 series

## B. SPECIFICATIONS

### Physical Characteristics

Insulation Material : glass reinforced polyester, UL flammability rating 94V-0.

Contact Material : Beryllium Copper or Phosphor Bronze.

Contact Area Plating : Gold over Nickel.

Wire Accomodation : AWG 26 and AWG 28 stranded, or AWG 28 and AWG 30 solid.

Contact Spacing : .100" ( 2.54mm ) grid terminates to .050" ( 1.27mm ) flat ribbon cable.

### Electrical Characteristics

Current Rating : 1 Amp.

Contact Resistance : 50 mΩ Max.

Dielectric Withstanding Voltage : 500Vdc Min. at sea level.

Insulation Resistance : 5,000 MΩ Min. at 500Vdc.

### Mechanical Characteristics

Durability : a. 500 cycles for 30 microinches gold plated.  
 b. 250 cycles for 15 microinches gold plated.  
 c. 50 cycles for gold flash.

Mating Force : 8 oz max. per contact.

Unmating Force : 2 oz min. per contact.

Contact-Body Retention Force : 8 oz min. per contact.

### Environmental Characteristics

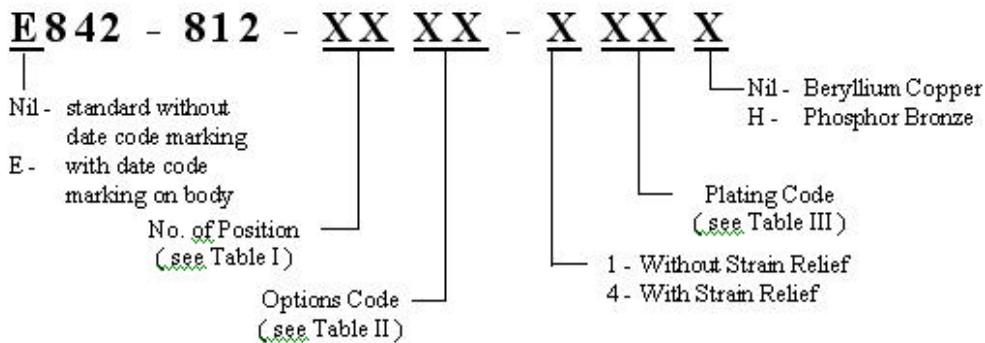
Humidity : 95% relative humidity at 40 °C for 96 hours.

Operating Temperature : -55 °C to +105 °C

## C. APPLICATIONS

- ◆ OA Equipment
- ◆ Computer, Peripheral
- ◆ Testing Equipment
- ◆ Switching System
- ◆ Industrial Control

## D. ORDERING INFORMATION



No. of Position	Strain Relief 842-800-1206		DIM A		DIM B	
	Grey	Black	in ± .004	mm ± .10	in ± .004	mm ± .10
10	-030	-050	0.68	[17.27]	0.40	[10.16]
14	-031	-051	0.88	[22.35]	0.60	[15.24]
16	-032	-052	0.98	[24.89]	0.70	[17.78]
20	-033	-053	1.18	[29.97]	0.90	[22.86]
26	-034	-054	1.48	[37.59]	1.20	[30.48]
30	-040	-060	1.68	[42.67]	1.40	[35.56]
34	-035	-055	1.88	[47.75]	1.60	[40.64]
36	-041	-061	1.98	[50.29]	1.70	[43.18]
40	-036	-056	2.18	[55.37]	1.90	[48.26]
50	-037	-057	2.68	[68.07]	2.40	[60.96]
60	-038	-058	3.18	[80.77]	2.90	[73.66]
64	-039	-059	3.38	[85.85]	3.10	[78.74]

Table II - Options Code

- 02 - Black, No CPK, Open Cover Packed separately (obsoleted)
- 03 - Grey, No CPK, Close Cover Packed separately
- 04 - Grey, Mold-in CPK, Close Cover Packed separately
- 05 - Black, No CPK, Close Cover Packed separately (obsoleted)
- 06 - Black, Mold-in CPK, Close Cover Packed separately (obsoleted)
- 09 - Black, No CPK, Open Cover, Pre-latch (obsoleted)
- 12 - Grey, No CPK, Open Cover Packed separately
- 13 - Grey, Mold-in CPK, Open Cover Packed separately
- 22 - Grey, No CPK, Open Cover, Pre-latch
- 33 - Grey, Mold-in CPK, Open Cover, Pre-latch
- 34 - Grey, Mold-in CPK, Close Entry Cover on even side
- 35 - Grey, Mold-in CPK, Close Entry Cover on odd side
- 43 - Grey, No CPK, Close Entry Cover on odd side
- 44 - Grey, No CPK, Close Entry Cover on even side
- 45 - Black, Mold-in CPK, Open Cover, Pre-latch (obsoleted)

**Optional black color socket is dis-continued. Only standard grey is available.**

Table III - Plating Code	
34 -	30 microinches ( 0.76 microns ) min. gold in mating area, 100 to 200 microinches ( 2.54 to 5.08 microns ) 90/10 tin lead plated in termination area. and 50 microinches ( 1.27 microns ) min. nickel underplated allover.
18 -	15 microinches ( 0.38 microns ) min. gold in mating area, 100 to 200 microinches ( 2.54 to 5.08 microns ) 90/10 tin lead plated in termination area. and 50 microinches ( 1.27 microns ) min. nickel underplated allover.
AA -	Gold Flash in mating area, 100 to 200 microinches ( 2.54 to 5.08 microns ) 90/10 tin lead plated in termination area. and 50 microinches ( 1.27 microns ) min. nickel underplated allover.

<b>Amphenol</b>	<b>Title :</b>	<b>Part Number :</b>
	812 series connector	812 series