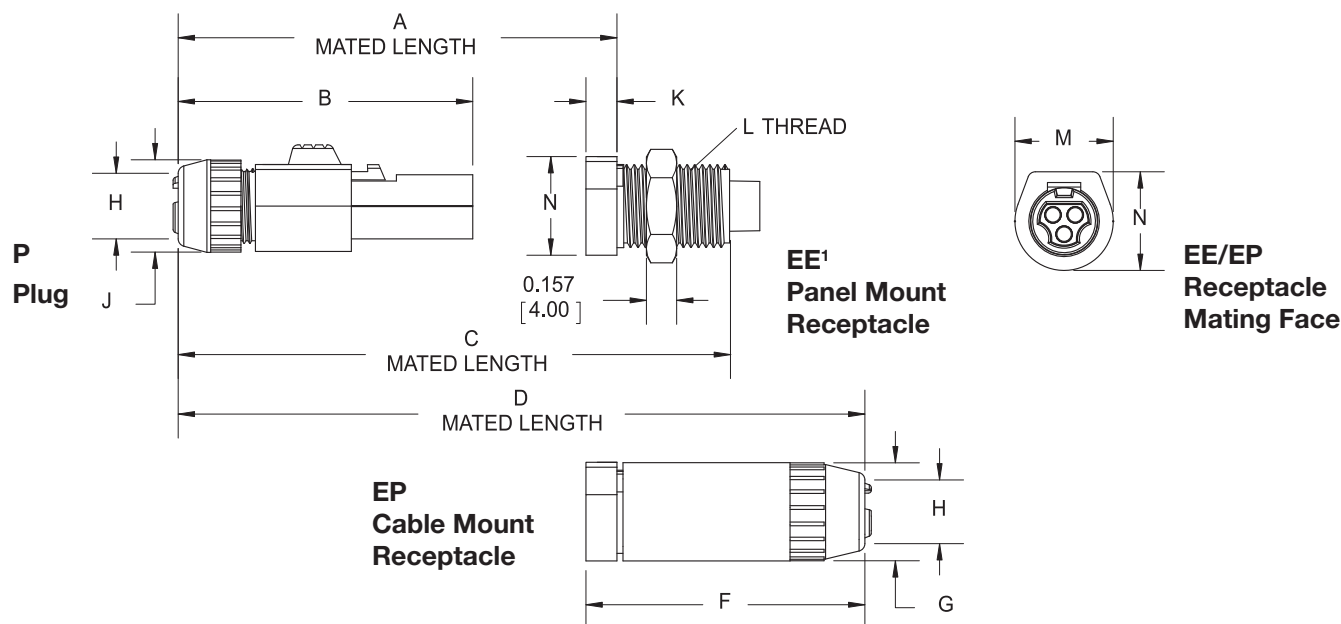




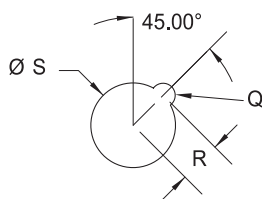
Circular Plastic Connectors

- 3, 4, 7, 9, 12 and 25 position models
- 1 to 8 Amps per contact
- Mixed signal and power or coax available
-  recognized components File No. 102195
- Each connector half accepts pins or sockets
- High impact plastic body
- Quick disconnect push button release
- Alignment and polarization provided by housing
- Crimp, solder cup, and pc contacts
- Color coding available

Connector Dimensions



Mounting Dimensions



Hole Punches

Part Number	Series	Maximum Recommended Panel Thickness in Steel	Maximum Recommended Panel Thickness in Alum.
T1903	D01	0.048 [1.25]	0.075 [1.90]
T1904	D02	0.062 [1.60]	0.094 [2.40]

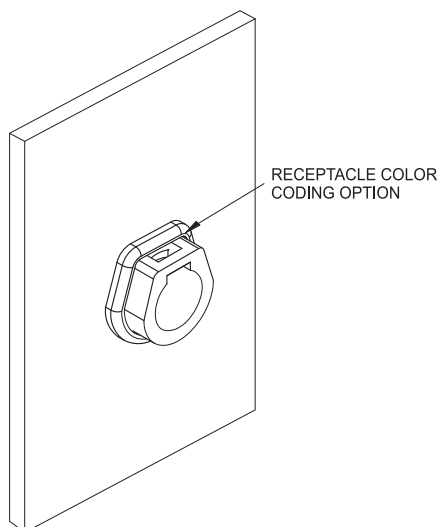
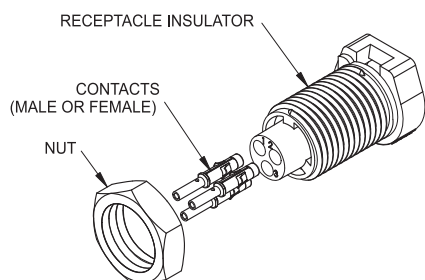
Dimension	D01 Housing	D02 Housing
A	1.142 [29.00]	1.358 [34.50]
B	1.614 [41.00]	1.950 [49.50]
C	1.732 [44.00]	2.087 [53.00]
D	2.400 [61.00]	2.953 [75.00]
F	1.500 [38.00]	1.772 [45.00]
G Dia.	0.512 [13.00]	0.709 [18.00]
H Dia.	0.118 [3.00] Min. 0.216 [5.50] Max.	0.197 [5.00] Min. 0.315 [8.00] Max.
J Dia.	0.472 [12.00]	0.709 [18.00]
K	0.161 [4.10]	0.278 [7.00]
L	M11 X 1.00 Thd.	M15 X 1.00 Thd.
M	0.512 [13.00]	0.669 [17.00]
N	0.512 [13.00]	0.689 [17.50]
Q Dia.	0.220 [5.60]	0.100 [2.54]
R	0.126 [3.20]	0.295 [7.50]
S Dia.	0.441 [11.20]	0.598 [15.20]

NOTE:

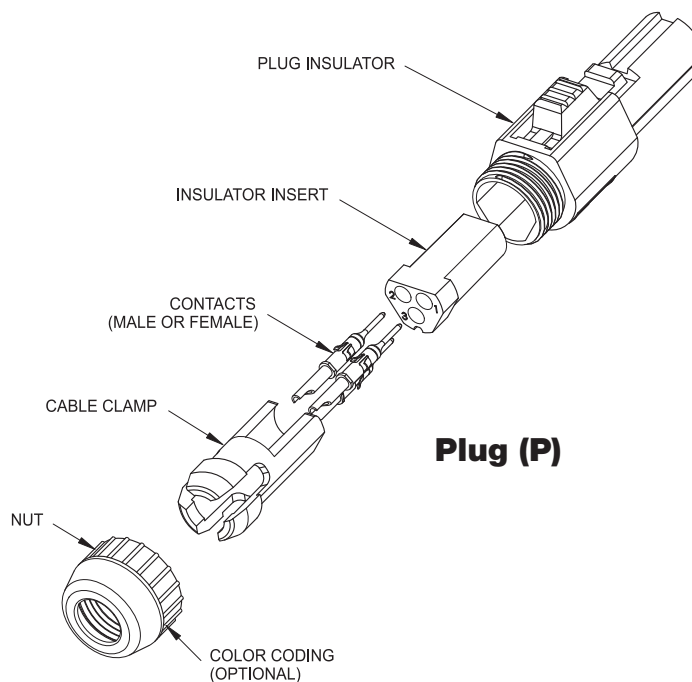
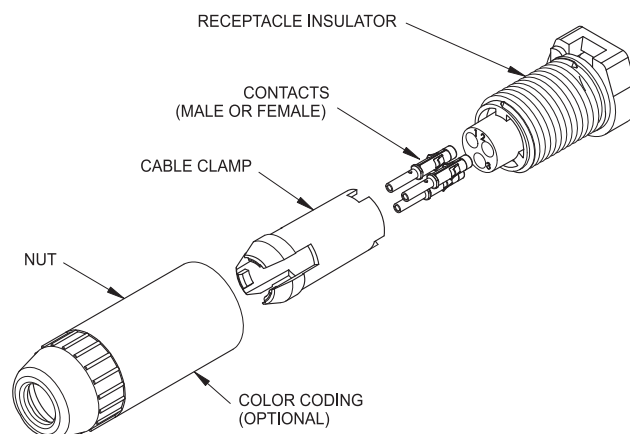
1) Recommended tightening torque for panel mount receptacle (0.452–0.678 N•M) for both D01 and D02.

Dimensions are in inches [mm]

Panel Mount Receptacle (EE)



Cable Mount Receptacle (EP)



Dimensions are in inches [mm]

D01 General Specifications

	3 Pin	4 Pin	9 Pin
Contact Diameter	0.024 [0.60]	0.024 [0.60]	0.016 [0.40]
Current Rating (Amps)	4	4	1
Contact Resistance (milliohms)	< 5	< 5	< 8
Extraction Force Per Contact (oz.)	0.50 to 2.00	0.50 to 2.00	0.60 to 1.60
Contact Life Cycles	100,000	100,000	100,000
Breakdown Voltage Between Contacts	> 2250V	> 2250V	> 1000V
Dielectric Withstanding Voltage	1650V	1650V	750V
Contact			
Socket Material	Beryllium copper wires and brass body (socket)		
Pin Material	Brass (pin)		
Plating Material	Gold over nickel		
Insulation Resistance	> 10 ³ megohms at 500 VDC		
Temperature Rating*			
Polycarbonate (D01 - 3 and 4 pin only)	-40° C to 85° C		—
Polyetherimide (D01 - 9 pin only)	—		-40° C to 125° C*

Accessories	3 Pin	4 Pin	9 Pin
Crimp Tool	AFM8 or (M22520/2-01)	AFM8 or (M22520/2-01)	AFM8 or (M22520/2-01)
Positioner	K547	K547	T1914
Removal Tool	S/DEM1.0060	S/DEM1.0060	—
Insertion Tool	T1866	T1866	T1916

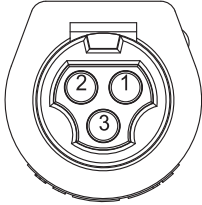
D02 General Specifications

	3 Pin	7 Pin	9 Pin	12 Pin	25 Pin
Contact Diameter	0.059 [1.50]	0.024 [0.60]	0.024 [0.60]	0.018 [0.50]	0.016 [0.40]
Current Rating (Amps)	8	4	4	2.5	1
Contact Resistance (milliohms)	< 2	< 5	< 5	< 8	< 8
Extraction Force Per Contact (oz.)	1.80 to 5.40	0.50 to 2.00	0.50 to 2.00	0.30 to 1.60	0.30 to 1.60
Contact Life Cycles	100,000	100,000	100,000	100,000	100,000
Breakdown Voltage Between Contacts	> 2250	> 2000	> 1560	> 1000	> 1000
Dielectric Withstanding Voltage	1650	1500	1150	750	750
Contact					
Socket Material	Beryllium copper wires and brass body (socket)				
Pin Material	Brass (pin)				
Plating Material	Gold over nickel				
Insulation Resistance	> 10 ³ megohms at 500 VDC				
Temperature Rating*					
Polycarbonate (D02 - 3, 7, 9 and 12 pin only)	-40° C to 85° C				—
Polyetherimide (D02 - 25 pin only)	—				-40° C to 125° C*

Accessories	3 Pin	7 and 9 Pin	12 Pin	25 Pin
Crimp Tool	AF8	AFM8 or M22520/2-01	AFM8 or M22520/2-01	AFM8 or M22520/2-01
Positioner	TP688	K623	T870	T1914
Removal Tool	S/DEM5.0150	S/DEM1.0060	—	—
Insertion Tool	T1888	T1866	T1271	T1916

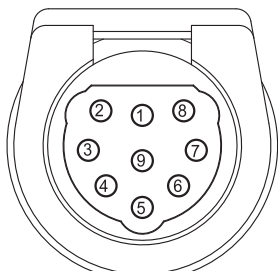
*If color coding option is specified, maximum temperature rating is 85° C.

Dimensions are in inches [mm]

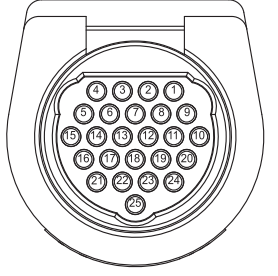
D01 3 Pin  Receptacle seen from mating side Housing Options Receptacle Panel Mount Receptacle Cable Plug Contact Options Crimp Socket – 22-26 AWG Crimp Socket – 18-20 AWG Solder Cup Socket – up to 22 AWG Crimp Pin – 22-26 AWG Crimp Pin –18-20 AWG Solder Cup Pin – up to 22 AWG Tools Crimp Tool Crimp Positioner Removal Tool Insertion Tool Example Part Numbers D01EEB306FRTAH D01EPB306FRTAH D01PB306MRT See part number configurator on page 2/17 for complete ordering information. AFM8 or M22520/2-01 K547 S/DEM1.0060 T1866
D01 4 Pin  Receptacle seen from mating side Housing Options Receptacle Panel Mount Receptacle Cable Plug Contact Options Crimp Socket – 22-26 AWG Crimp Socket – 18-20 AWG Solder Cup Socket – up to 22 AWG Crimp Pin – 22-26 AWG Crimp Pin –18-20 AWG Solder Cup Pin – up to 22 AWG Tools Crimp Tool Crimp Positioner Removal Tool Insertion Tool Example Part Numbers D01EEB406FRTAH D01EPB406FRTAH D01PB406MRT See part number configurator on page 2/17 for complete ordering information. AFM8 or M22520/2-01 K547 S/DEM1.0060 T1866
D01 9 Pin  Receptacle seen from mating side Housing Options Receptacle Panel Mount Receptacle Cable Plug Contact Options Crimp Socket – 26-28 AWG Solder Cup Socket – up to 26 AWG Crimp Pin – 26-28 AWG Solder Cup Pin – up to 26 AWG Tools Crimp Tool Crimp Positioner Insertion Tool Example Part Numbers D01EEB904FRUTAH D01EPB904FRUTAH D01PB904MRUT See part number configurator on page 2/17 for complete ordering information. AFM8 or M22520/2-01 T1914 T1916

D02 3 Pin  Receptacle seen from mating side	Housing Options	Example Part Numbers
	Receptacle Panel Mount Receptacle Cable Plug	D02EEB315FRTAH D02EPB315FRTAH D02PB315MRT
	Contact Options	See part number configurator on page 2/17 for complete ordering information.
	Crimp Socket – 18 and 20 AWG Solder Cup Socket – up to 16 AWG Crimp Pin – 18 and 20 AWG Solder Cup Pin – up to 16 AWG	
	Tools	
	Crimp Tool Crimp Positioner Removal Tool Insertion Tool	AF8 TP688 S/DEM5.0150 T1888

D02 7 Pin  Receptacle seen from mating side	Housing Options	Example Part Numbers
	Receptacle Panel Mount Receptacle Cable Plug	D02EEB706FRTAH D02EPB706FRTAH D02PB706MRT
	Contact Options	See part number configurator on page 2/17 for complete ordering information.
	Crimp Socket – 22-26 AWG Solder Cup Socket – up to 22 AWG Crimp Pin – 22-26 AWG Solder Cup Pin – up to 22 AWG	
	Tools	
	Crimp Tool Crimp Positioner Removal Tool Insertion Tool	AFM8 or M22520/2-01 K623 S/DEM1.0060 T1866

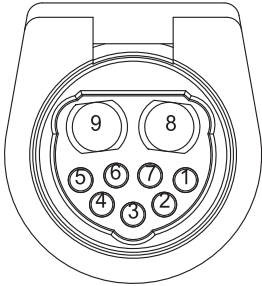
D02 9 Pin  Receptacle seen from mating side	Housing Options	Example Part Numbers
	Receptacle Panel Mount Receptacle Cable Plug	D02EEB906FRTAH D02EPB906FRTAH D02PB906MRT
	Contact Options	See part number configurator on page 2/17 for complete ordering information.
	Crimp Socket – 22-26 AWG Solder Cup Socket – up to 22 AWG Crimp Pin – 22-26 AWG Solder Cup Pin – up to 22 AWG	
	Tools	
	Crimp Tool Crimp Positioner Removal Tool Insertion Tool	AFM8 or M22520/2-01 K623 S/DEM1.0060 T1866

D02 12 Pin  Receptacle seen from mating side	Housing Options Receptacle Panel Mount Receptacle Cable Plug Contact Options Crimp Socket – 22-26 AWG Solder Cup Socket – up to 22 AWG Crimp Pin – 22-26 AWG Solder Cup Pin – up to 22 AWG Tools Crimp Tool Crimp Positioner Insertion Tool	Example Part Numbers D02EEB125FRTAH D02EPB125FRTAH D02PB125MRT See part number configurator on page 2/17 for complete ordering information. AFM8 or M22520/2-01* T870 T1271
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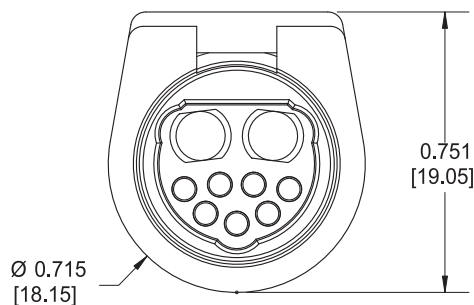
D02 25 Pin  Receptacle seen from mating side	Housing Options Receptacle Panel Mount Receptacle Cable Plug Contact Options Crimp Socket – 26-28 AWG Solder Cup Socket – up to 26 AWG Crimp Pin – 26-28 AWG Solder Cup Pin – up to 26 AWG Tools Crimp Tool Crimp Positioner Insertion Tool	Example Part Numbers D02EEB2504FRUTAH D02EPB2504FRUTAH D02PB2504MRUT See part number configurator on page 2/17 for complete ordering information. AFM8 or M22520/2-01 T1914 T1916
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Combination Connectors Power and Signal

- Two 8 Amp and seven 2.5 Amp Signal Contacts • Crimp Contacts

D02 Power and Signal  Receptacle seen from mating side	Housing Options	Example Part Numbers*	
	Receptacle Panel Mount Plug	D02EEB215/705FRTAH D02PB215/705MRT	
	Contact Options	See part number configurator on page 2/17 for complete ordering information.	
	Power Socket – 16-20 AWG Power Pin – 16-20 AWG Signal Socket – 22-26 AWG Signal Pin – 22-26 AWG		
Tools			
Crimp Tool Crimp Positioner (Pin) Crimp Positioner (Socket) Removal Tool Insertion Tool		Power AF8 T1164 TP688 T1124 —	Signal AFM8 T870 T870 — T1215

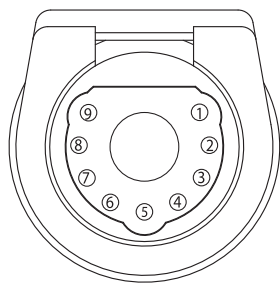
General Specifications		
Contacts	Power	Signal
Number of Contacts	2	7
Diameter	0.059 [1.50]	0.018 [0.50]
Current Rating (Amps)	8	2.50
Contact Resistance	< 2.0 milliohms	< 8.0 milliohms
Extraction Force	1.8 to 5.4 oz.	0.3 to 1.6 oz.
Contact Material Pins Sockets	Brass Beryllium copper wires and brass body	
Insulator Material Receptacle Plug	Polycarbonate Polycarbonate	
Flammability	UL94V0	
Temperature Rating	-40° C to 85° C	
Insulation Resistance	> 10 Mohm at 500 VDC	



NOTE:
*B = Black Polycarbonate Available in Power and Signal.

Dimensions are in inches [mm]

Combination Connectors Coax or Power and Signal

D02 Coax or Power and Signal  Receptacle seen from mating side	Housing Options Receptacle Panel Mount Receptacle Cable Plug		Example Part Numbers¹ D02EEB905FR1C1FRUTHA D02EPB905FR1C1FRUTHA D02PB905MR1C1MRUT		
	Contact Options Coax Crimp Socket – RRG 316, RG316DB Coax Solder Cup Socket – RG405, T-Flex 405 Coax Crimp Pin – RG316, RG316DB Coax Solder Cup Pin – RG405, T-Flex 405 Power Crimp Socket – 12 AWG Power Crimp Pin – 12 AWG Signal Crimp Socket – 22-26 AWG Signal Solder Cup Socket – 22-26 AWG Signal Crimp Pin – 22-26 AWG Signal Solder Cup Pin – 22-26 AWG		See part number configurator on page 2/17 for complete ordering information.		
Tools					
	Crimp Tool	Coax HX3 (Outer) AFM8 (Inner)	Power M309	Signal AFM8	
	Crimp Die Set	T1958 (Outer) or T2019 (Outer for RG316DB)	–	–	
	Crimp Positioner	T1957 (Inner)	–	–	
	Removal Tool	T1982	T1981	T870	
	Insertion Tool	–	T1982	–	
			–	T1215	

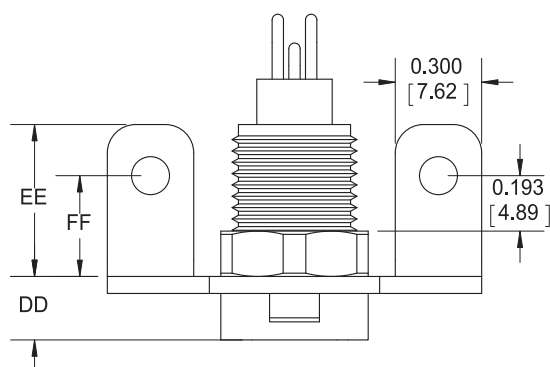
NOTES:

1) H = Black Polyetherimide (High Temperature).

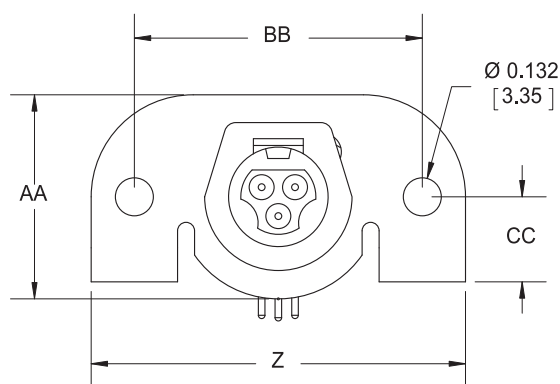
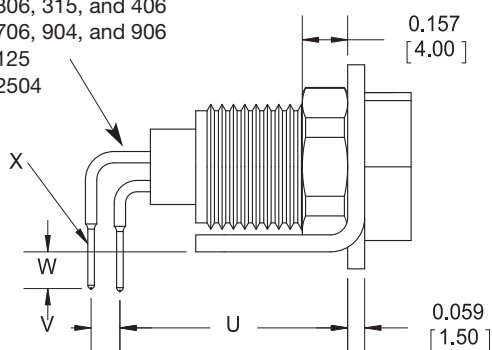
2) Available in Coax or Power and Signal.

Dimensions are in inches [mm]

Printed Circuit Board Receptacles (Right Angle)



2 Rows: 306, 315, and 406
3 Rows: 706, 904, and 906
4 Rows: 125
6 Rows: 2504



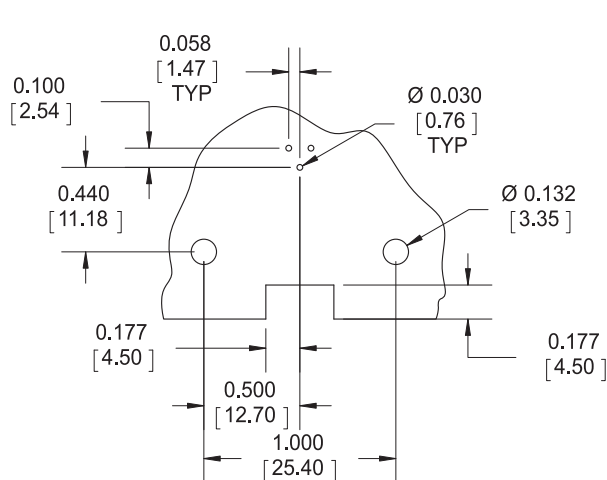
Dimension	D01 Housing 3 and 4 Position	D01 Housing 9 Position	D02 Housing 3 Position	D02 Housing 7 and 9 Position	D02 Housing 12 Position	D02 Housing 25 Position
U	0.790 [20.07]	0.700 [17.79]	0.834 [21.19]	0.742 [18.85]	0.689 [17.50]	0.655 [16.65]
V	0.100 [2.54]	0.075 [1.90]	0.150 [3.81]	0.100 [2.54]	0.100 [2.54]	0.075 [1.90]
W	0.187 [4.74]	0.181 [4.60]	0.184 [4.68]	0.177 [4.50]	0.173 [4.39]	0.181 [4.60]
X Dia.	0.024 [0.60]	0.015 [0.38]	0.059 [1.50]	0.024 [0.60]	0.017 [0.435]	0.015 [0.38]
Z	1.300 [33.02]	1.300 [33.02]	1.500 [38.10]	1.500 [38.10]	1.500 [38.10]	1.500 [38.10]
AA	0.709 [18.00]	0.709 [18.00]	0.866 [22.00]	0.866 [22.00]	0.866 [22.00]	0.866 [22.00]
BB	1.000 [25.40]	1.000 [25.40]	1.200 [30.48]	1.200 [30.48]	1.200 [30.48]	1.200 [30.48]
CC	0.236 [6.00]	0.236 [6.00]	0.315 [8.00]	0.315 [8.00]	0.315 [8.00]	0.315 [8.00]
DD	0.220 [5.60]	0.220 [5.60]	0.335 [8.50]	0.335 [8.50]	0.335 [8.50]	0.335 [8.50]
EE	0.528 [13.40]	0.528 [13.40]	0.610 [15.50]	0.610 [15.50]	0.610 [15.50]	0.610 [15.50]
FF	0.350 [8.89]	0.350 [8.89]	0.400 [10.16]	0.400 [10.16]	0.400 [10.16]	0.400 [10.16]

Dimensions are in inches [mm]

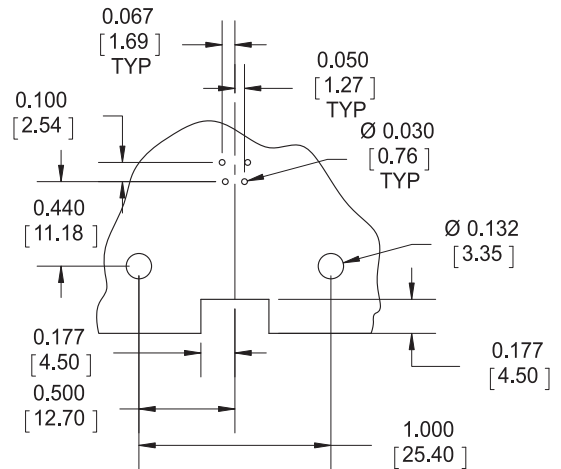
Mounting Dimensions

Right Angle Daughter Board Application

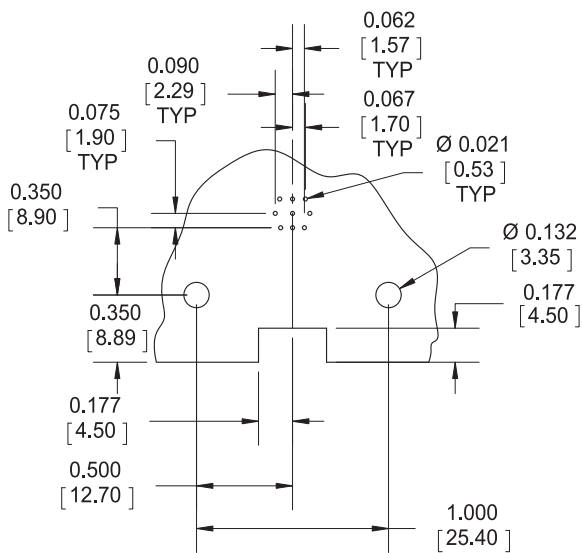
Printed Circuit Board Shown From Component Side



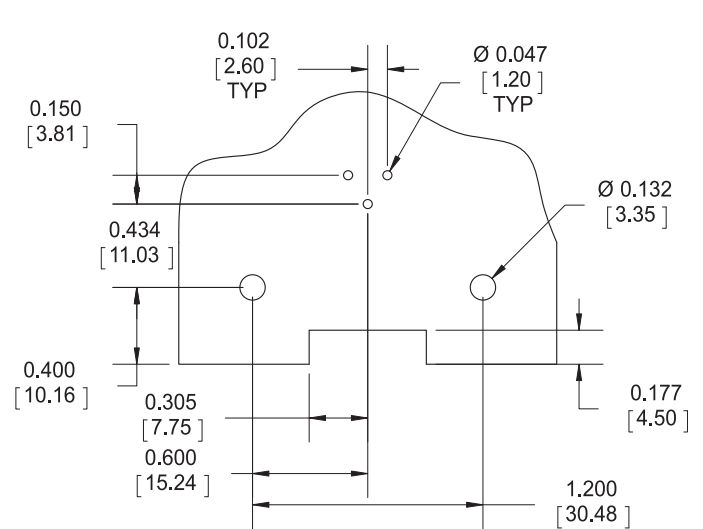
Printed Circuit Board Layout for
D01EEB306FB24TABH



Printed Circuit Board Layout for
D01EEB406FB24TABH



Printed Circuit Board Layout for
D01EEB904FB24UTABH

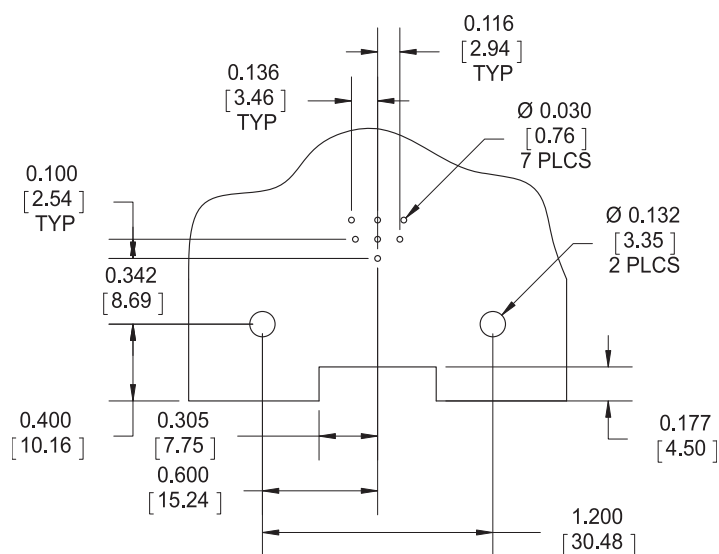


Printed Circuit Board Layout for
D02EEB315FB24TABH

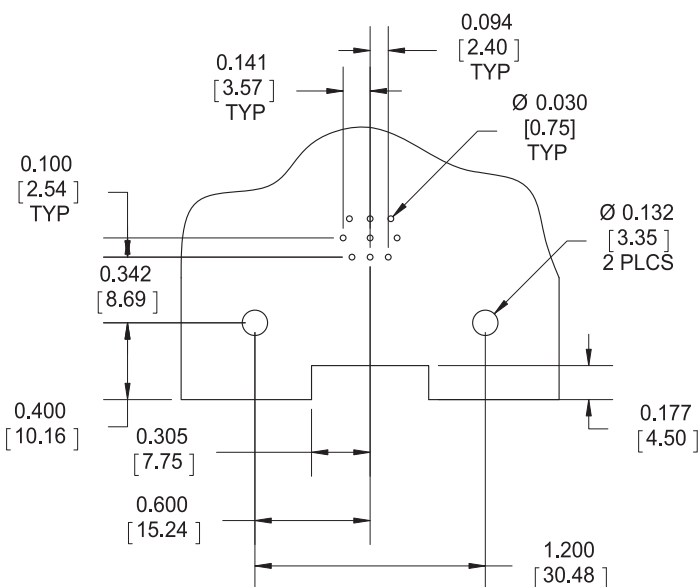
Dimensions are in inches [mm]

Mounting Dimensions

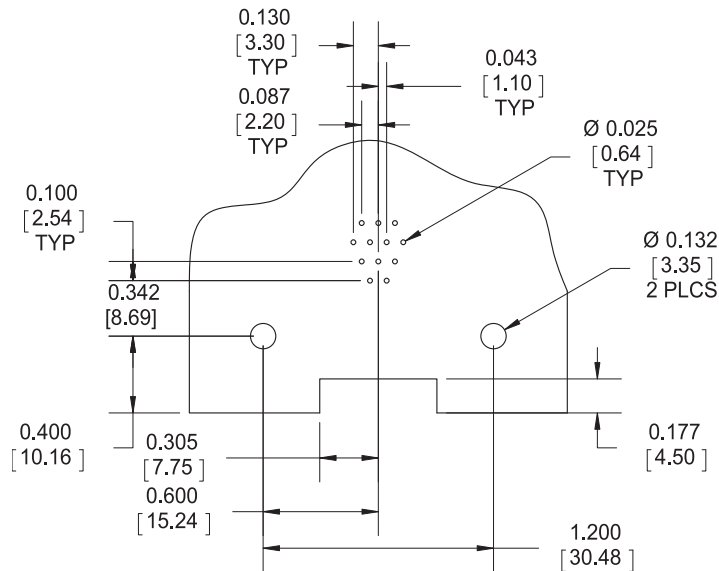
Right Angle Daughter Board Application Printed Circuit Board Shown From Component Side



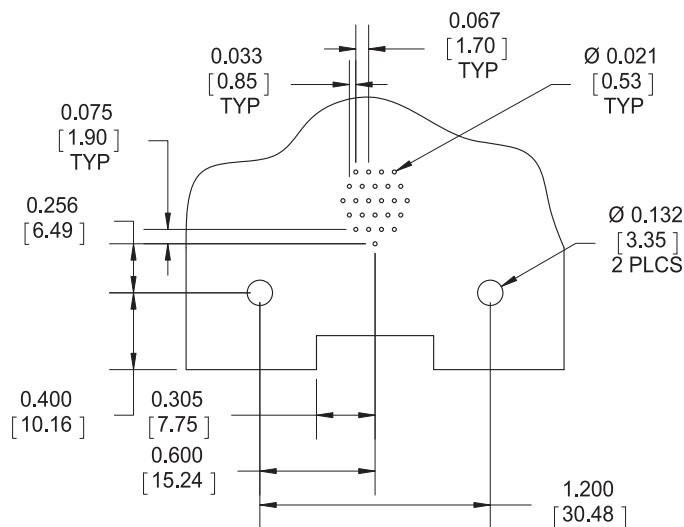
**Printed Circuit Board Layout for
D02EEB706FB24TABH**



**Printed Circuit Board Layout for
D02EEB906FB24TABH**



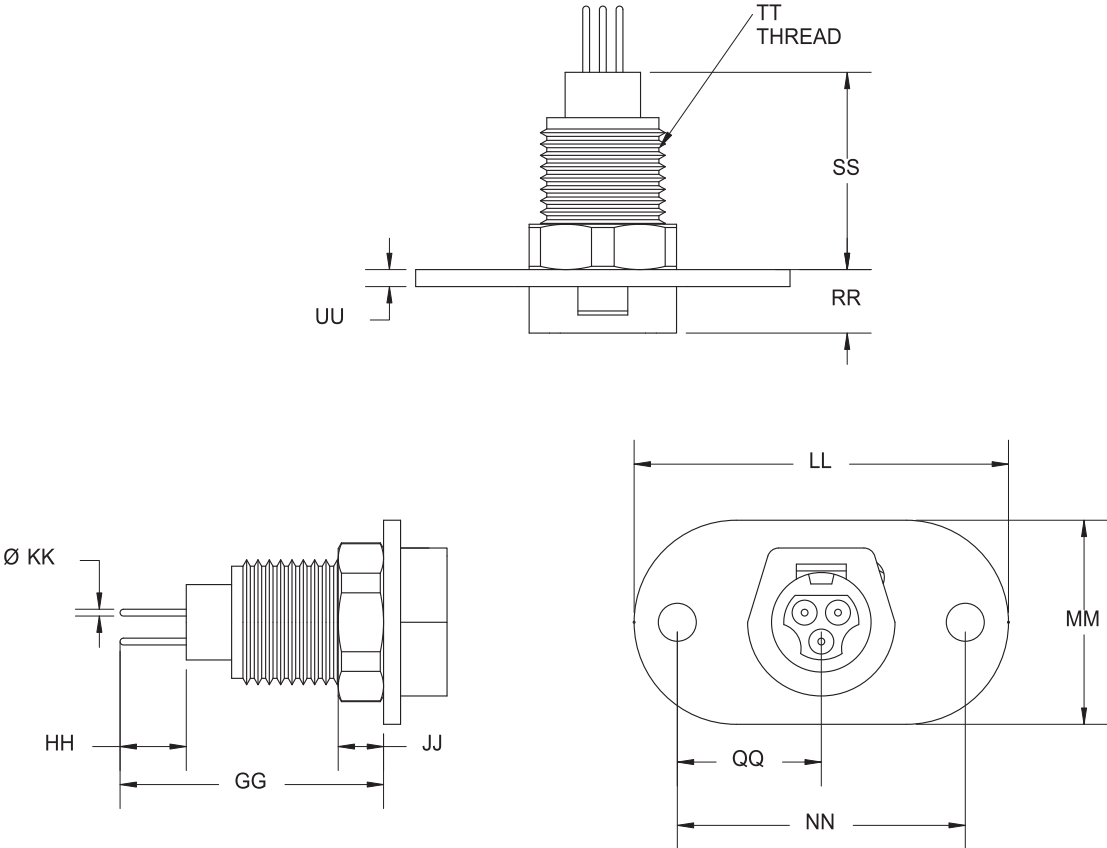
**Printed Circuit Board Layout for
D02EEB125FB24TABH**



**Printed Circuit Board Layout for
D02EEB2504FB24UTABH**

Dimensions are in inches [mm]

Printed Circuit Board Receptacles (Straight Dip Solder)



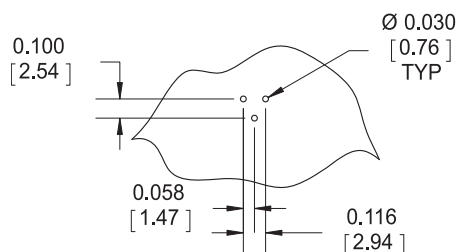
Dimension	D01 Housing 3 and 4 Position	D01 Housing 9 Position	D02 Housing 3 Position	D02 Housing 7 and 9 Position	D02 Housing 12 Position	D02 Housing 25 Position
GG	0.914 [23.23]	0.866 [22.00]	1.059 [26.91]	0.989 [25.12]	0.923 [23.45]	0.870 [22.10]
HH	0.229 [5.82]	0.181 [4.60]	0.193 [4.91]	0.221 [5.61]	0.233 [5.94]	0.260 [4.60]
JJ	0.157 [4.00]	0.157 [4.00]	0.157 [4.00]	0.157 [4.00]	0.157 [4.00]	0.157 [4.00]
KK	0.023 [0.58]	0.015 [0.38]	0.039 [1.00]	0.023 [0.58]	0.017 [0.43]	0.015 [0.38]
LL	1.300 [33.02]	1.300 [33.02]	1.500 [38.10]	1.500 [38.10]	1.500 [38.10]	1.500 [38.10]
MM	0.709 [18.00]	0.709 [18.00]	0.866 [22.00]	0.866 [22.00]	0.866 [22.00]	0.866 [22.00]
NN	1.000 [25.40]	1.000 [25.40]	1.200 [30.48]	1.200 [30.48]	1.200 [30.48]	1.200 [30.48]
QQ	0.500 [12.70]	0.500 [12.70]	0.600 [15.24]	0.600 [15.24]	0.600 [15.24]	0.600 [15.24]
RR	0.220 [5.60]	0.220 [5.60]	0.335 [8.50]	0.335 [8.50]	0.335 [8.50]	0.335 [8.50]
SS	0.685 [17.40]	0.685 [17.40]	0.866 [22.00]	0.768 [19.50]	0.689 [17.50]	0.689 [17.50]
TT	M11 x 1.00 Thd.	M11 x 1.00 Thd.	M15 x 1.00 Thd.	M15 x 1.00 Thd.	M15 x 1.00 Thd.	M15 x 1.00 Thd.
UU	0.059 [1.50]	0.059 [1.50]	0.059 [1.50]	0.059 [1.50]	0.059 [1.50]	0.059 [1.50]

Dimensions are in inches [mm]

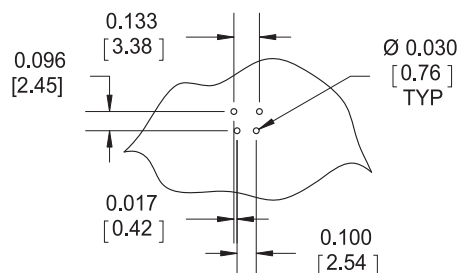
Mounting Dimensions

Straight Contact Printed Circuit Board Application

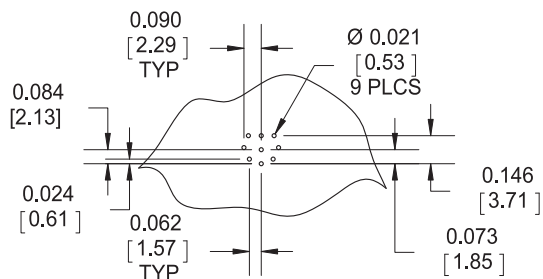
Printed Circuit Board Shown From Component Side



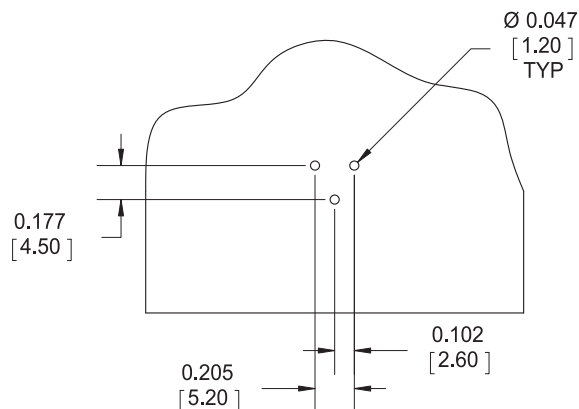
**Printed Circuit Board Layout for
D01EEB306FD21TABH**



**Printed Circuit Board Layout for
D01EEB406FD21TABH**



**Printed Circuit Board Layout for
D01EEB904FD21UTABH**



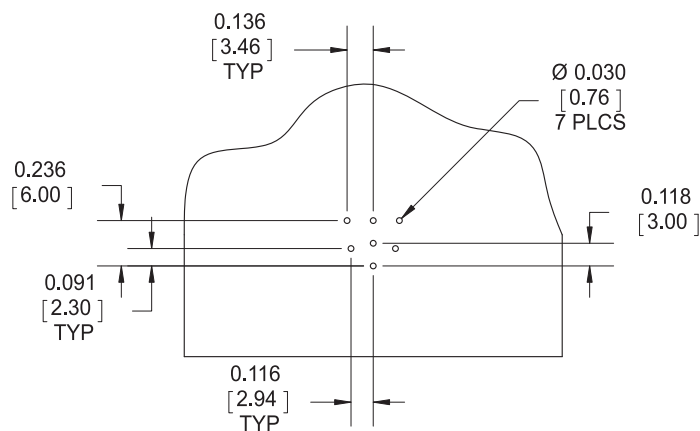
**Printed Circuit Board Layout for
D02EEB315FD21TABH**

Dimensions are in inches [mm]

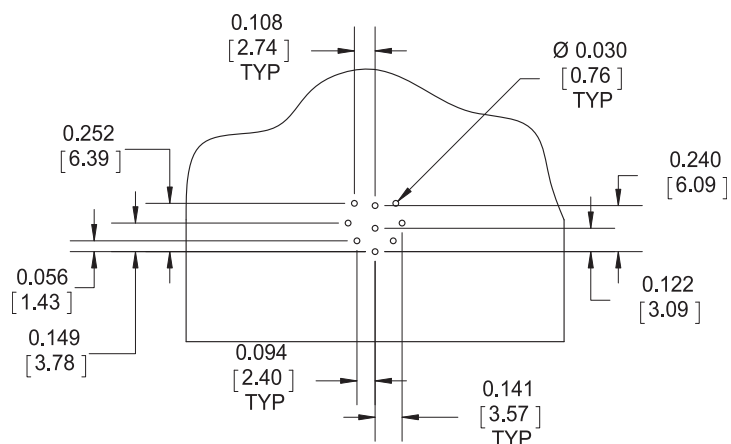
Mounting Dimensions

Straight Contact Printed Circuit Board Application

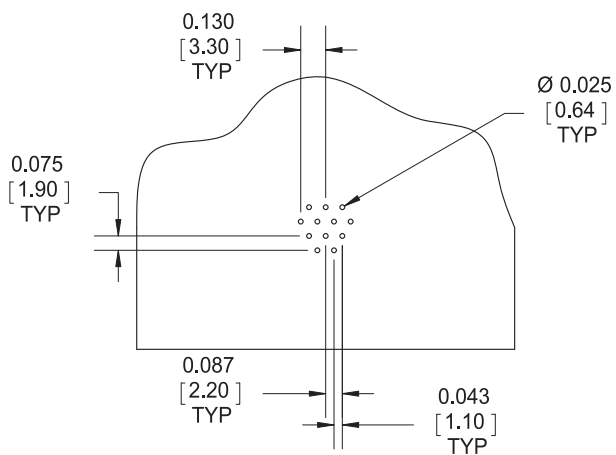
Printed Circuit Board Shown From Component Side



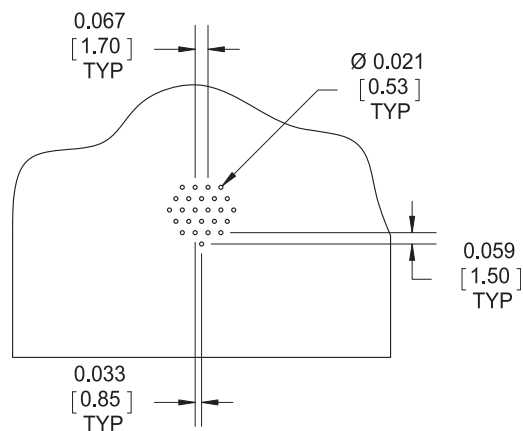
**Printed Circuit Board Layout for
D02EEB706FD21TABH**



**Printed Circuit Board Layout for
D02EEB906FD21TABH**



**Printed Circuit Board Layout for
D02EEB125FD21TABH**



**Printed Circuit Board Layout for
D02EEB2504FD21UTABH**

Dimensions are in inches [mm]

Ordering Information

Connector Housing	D01, D02	D01	V	P	B	306	F	B	24	U	TABH
Color Code Indicator*	D = Blue R = Red T = Orange V = Green W = White Y = Yellow Omit character if not required										
Insulator	P = Plug EE = Receptacle panel mount EP = Receptacle cable mount (EP Not available for 215/705 style)										
Main Body Color	B = Black										
Contact Arrangement	D01 3 Pin = 306 D01 4 Pin = 406 D01 9 Pin = 904 D02 3 Pin = 315 D02 7 Pin = 706 D02 9 Pin = 906 D02 12 Pin = 125 D02 25 Pin = 2504 D02 Power/Signal = 215/705										
Plating	See Plating Reference										
Material	Omit for Polycarbonate U = Polyetherimide D01 904 and D02 2504 only										
Terminal Styles	00 = B&D terminal connectors with no bracket 21 = Mounting for straight printed circuit board 24 = Mounting for right angle print circuit board Omit for cable and front panel mount on R&S terminal. B = Right angle (female printed circuit mount only) ¹ D = Straight (female printed circuit mount only) ¹ R = Crimp for 22-26 AWG (shipped unassembled) RR = Crimp for 18-20 AWG (D01/306 and D01/406 only. (shipped unassembled) S = Solder cup (shipped unassembled) Leave blank for no contacts										
Contact Gender	M = Male F = Female N = No contacts										

**Note: Color code indicators are custom order only. Components are polycarbonate material.*

D02 Coax or Power and Signal Ordering Information

Connector Housing	D02	D02	V	P	B	905	M	R	1C1	M	R	U	TH
Color Code Indicator*	Omit character if not required												
Insulator	P = Plug EE = Receptacle panel mount EP = Receptacle cable mount												
Color	B = Black												
Contact Arrangement	905												
Signal Contact Gender	M = Male F = Female N = No signal contacts												
Terminal Styles	R = Crimp S = Solder N = No contacts												
Plating	See Plating Reference												
Material	U = Polyetherimide (black)												
Terminal Styles	R = Crimp S = Solder Omit for connector without power/coax contacts												
Coax Contact Gender	M = Male F = Female N = No coax / power contacts												
Coaxial/Power Cable Type	1C1 = RG316 (crimp) 1C2 = T-Flex 405, RG 405 (solder only, cannot be used with crimp) 1C3 = RG316DB 1P1 = 12 AWG N = No contacts												

**Note: Color code indicators are custom order only. Components are polycarbonate material.*

Plating Reference

Male Pins:	T = 10µin gold (min) over nickel TH = 50µin gold (min) over nickel
Female Sockets:	TAH = 50µin gold (min) over nickel on mating surface, gold flash over nickel on termination TABH = 50µin gold (min) over nickel on mating surface, tin lead over nickel on termination (D & B only)

NOTE:
1) Check factory for availability.

Dimensions are in inches [mm]