

Specifications

"F" Series .100" \varnothing

Material and Finish

Molded Insulator:	<i>40% Glass Filled Polyphenylene Sulfide, Per MIL-DTL-55302</i>
Pin Contacts:	<i>Copper Alloy per MIL-DTL-55302.</i>
Socket Contacts:	
Contacts:	<i>Be Cu per MIL-DTL-55302.</i>
Terminal:	<i>Copper Alloy per MIL-DTL-55302.</i>
Contact Finish:	<i>Gold Plate per MIL-DTL-55302 Localized finish per MIL-DTL-55302.</i>
Hardware:	<i>Stainless Steel per ASTM-A581 or A582. Passivated per SAE-AMS-2700</i>
Guide Sockets, Polarized	<i>Be Cu per ASTM-B196 or B197. Nickel Plated per SAE-AMS-QQ-N-290</i>
Gasket	<i>Silicone Rubber per A-A-59588</i>
Tolerance:	<i>Decimals $\pm .010$, Angles $\pm 5^\circ$ unless otherwise specified.</i>
Connector Marking:	<i>Marking shall meet the requirements of MIL-STD-1285 and MIL-STD-202 method 215 for permanency. Pin numbers indicating every fourth position are marked on the side of the connector.</i>

Performance

"F" Series .100" ϕ

Wire Size:	#22 AWG Stranded
Contact Rating:	5 ampere maximum per contact
Solderability:	Pretinning meets the requirements of MIL-STD-202, Method 208.
Operating Temp:	-65° to +125°C -85° to +257°F

<u>Test</u>	<u>Requirements</u>	<u>Test Method per MIL-STD-1344 (Superseded by EIA364)</u>
Contact Resistance	Will not exceed .020 ohms on individual contact pair with average not to exceed .010 ohms	#3004 (EIA364.6)
Dielectric Withstanding	1000 vrms, 60 Hz @ sea level 300 vrms, 60 Hz @ 70,000 feet 300 vrms, 60 Hz @ 100,000 feet	#3001 (EIA364.20)
Insulation Resistance	5000 megohms minimum @ 500 VDC	#3003 (EIA364.21)
Durability	500 connector mating cycles	MIL-DTL-55302 para. 4.5.9
Temperature Cycling	5 (1) hr cycles; -65° to +125°C	#1003 (EIA364.32)
Vibration	10-2000 Hz, 15G Peak	#2005 (EIA364.28)
Salt Spray	5% salt spray @ 95°F for 48 hours	#1001 (EIA 364.26)
Shock	100G sawtooth, 6ms	#2004 (EIA364.27)
Humidity	10 days @ 25° to 65°C, 80-98% RH	#1002 (EIA364.31)
Contact Engagement Low Force	4 oz. Maximum with a .0305 dia pin per MS3197-22-Y1 (Superseded by SAE-AS31971)	#2014 (EIA364.37) & MIL-DTL-55302
Contact Separation Low Force	.5 oz. Minimum with a .0295 dia pin per MS3197-22-X1 (Superseded by SAE-AS31971)	#2014 (EIA364.37) & MIL-DTL-55302

.100 SERIES 2 ROW STRAIGHT RECEPTACLE or PLUG AND RIGHT ANGLE RECEPTACLE

FBR | M55302 / 56 Receptacle
M55302 / 62 Receptacle
M55302 / 64 Receptacle

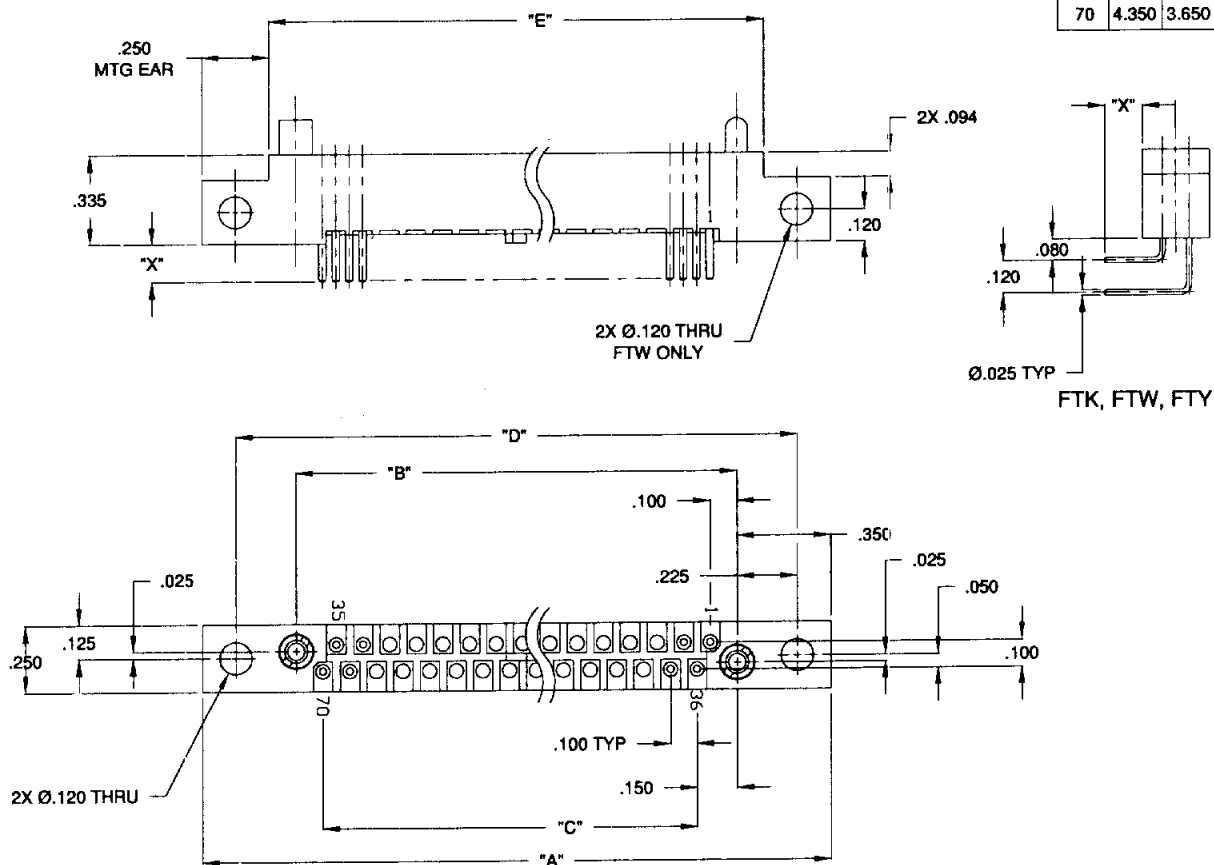
FDR - M55302 / 58 Receptacle

P/N **FXX XX XX - XX - XX - XXX**

Body Style
Contact Code see page F18
Hardware Code see pages F19-F20, F23

Special Variation see page F35
Polarization see page F23
Number of Contact Positions

Dimensions					
No. of Cnt's	"A"	"B"	"C"	"D"	"E"
10	1.350	.650	.400	1.100	.850
14	1.550	.850	.600	1.300	1.050
20	1.850	1.150	.900	1.600	1.350
24	2.050	1.350	1.100	1.800	1.550
26	2.150	1.450	1.200	1.900	1.650
30	2.350	1.650	1.400	2.100	1.850
36	2.650	1.950	1.700	2.400	2.150
40	2.850	2.150	1.900	2.600	2.350
44	3.050	2.350	2.100	2.800	2.550
50	3.350	2.650	2.400	3.100	2.850
54	3.550	2.850	2.600	3.300	3.050
56	3.650	2.950	2.700	3.400	3.150
60	3.850	3.150	2.900	3.600	3.350
66	4.150	3.450	3.200	3.900	3.650
70	4.350	3.650	3.400	4.100	3.850



PLUG | FDR - AS SHOWN **WITH** MTG EARS
FBR - **WITHOUT** MTG EARS

RECEPTACLE | FDR - AS SHOWN **WITH** MTG EARS
FBR - **WITHOUT** MTG EARS
FTW - AS SHOWN **WITH** MTG EARS, 2X Ø.120 THRU
FTY - **WITHOUT** MTG EARS
FTK - **WITH** MTG EARS

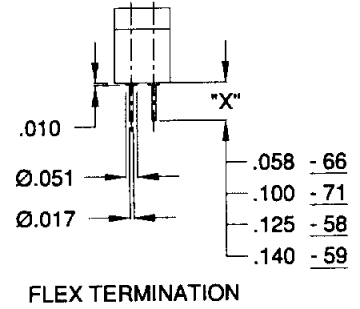
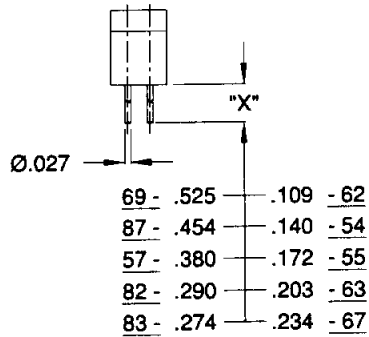
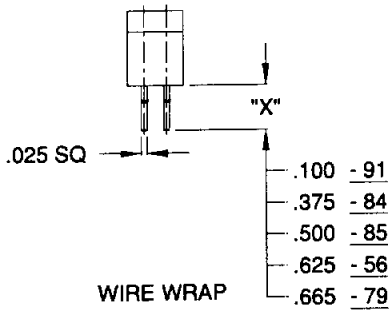
MATING CONNECTORS:

FAR, FER, FKA, FKE, FKF, FKH
FKJ, FKR, FKV, FKZ, FTG, FTF, FTJ

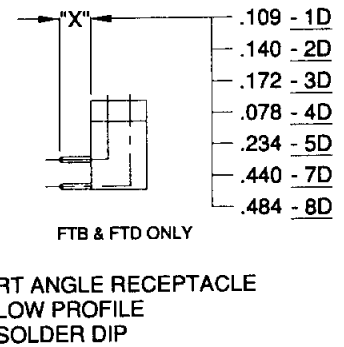
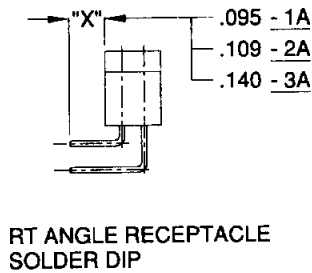
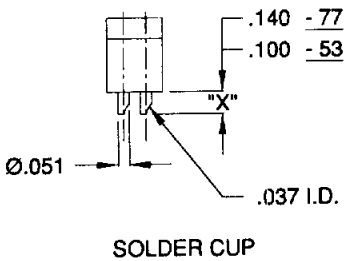
FAR, FCR, FER, FFR, FGR
FKA, FKE, FKF, FKH
FKJ, FKR, FKV, FKZ

.100 SERIES 2 ROW CONTACT CODES

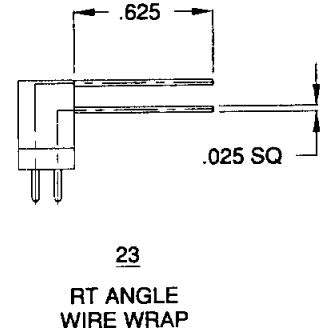
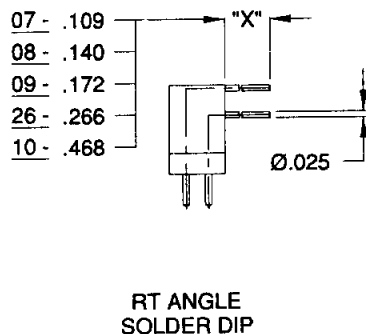
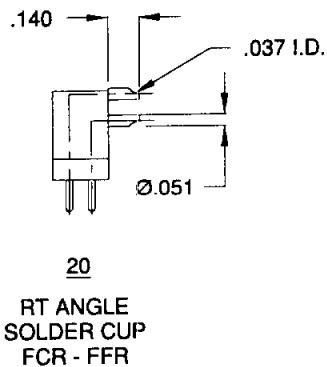
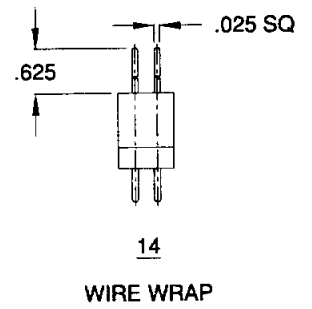
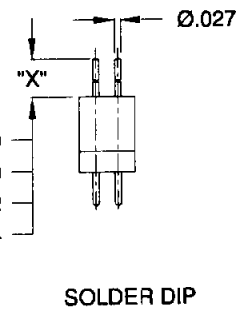
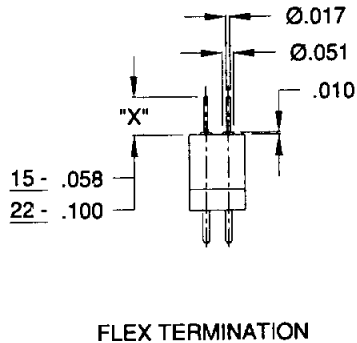
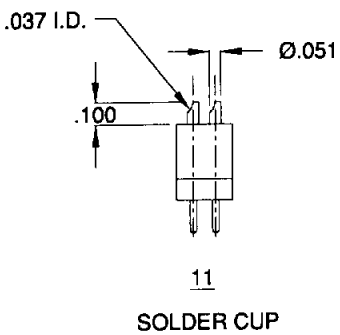
RECEPTACLE



SOLDER DIP

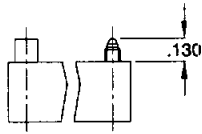


PLUG

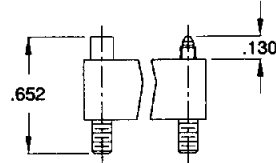


.100 SERIES 2 & 3 ROW HARDWARE CODES

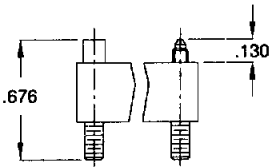
FIXED JACKSETS



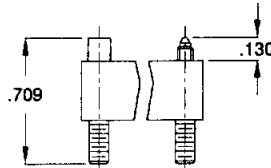
07 - FIXED JACKSET
FIGURE #1



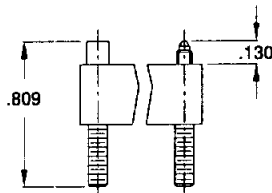
29 - FIXED JACKSET
FIGURE #2



55 - LONG FIXED JACKSET
FIGURE #3



11 - LONG FIXED JACKSET
FIGURE #4

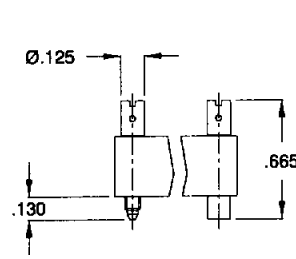


35 - EX. LONG FIXED JACKSET
FIGURE #5

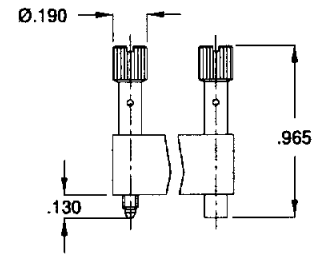
Unless stated otherwise, all threads are #2-56 UNC

CODE	MIL CODE	FIG NO.	HARDWARE DESCRIPTION	MIL APPROVED
07	F	1	FIXED JACKSET	/138
08			FIXED JACKSET REVERSED	NO
09			FIXED JACKSCREWS (2)	NO
10			FIXED JACKSOCKETS (2)	NO
29		2	FIXED JACKSET	NO
47			FIXED JACKSCREWS REVERSED	NO
55		3	LONG FIXED JACKSET	NO
64			LONG FIXED JACKSET REVERSED	NO
11		4	LONG FIXED JACKSET	NO
12			LONG FIXED JACKSET REVERSED	NO
13			LONG FIXED JACKSCREWS (2)	NO
14			LONG FIXED JACKSOCKETS (2)	NO
35		5	EX. LONG FIXED JACKSET	NO
60			EX. LONG FIXED JACKSET REVERSED	NO

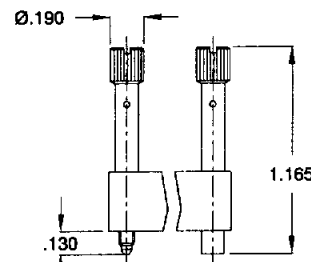
TURNING JACKSETS



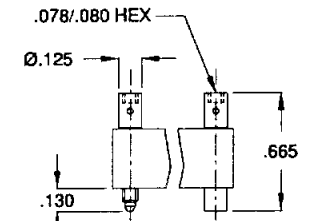
15 - SHORT TURNING JACKSET
FIGURE #1



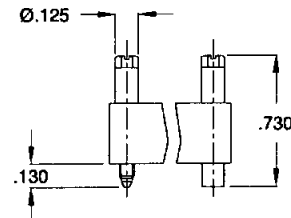
19 - LONG TURNING JACKSET
FIGURE #2



31 - EX. LONG TURNING JACKSET
FIGURE #3



25 - HEX TURNING JACKSET
FIGURE #4



58 - SHORT HEX/SLOT TURNING JACKSET
FIGURE #5

Unless stated otherwise, all threads are #2-56 UNC

CODE	MIL CODE	FIG NO.	HARDWARE DESCRIPTION	MIL APPROVED
15	S	1	SHORT TURNING JACKSET	/138
16			SHORT TURNING JACKSET REVERSED	NO
17			SHORT TURNING JACKSCREWS (2)	NO
18			SHORT TURNING JACKSOCKETS (2)	NO
19		2	LONG TURNING JACKSET	NO
20			LONG TURNING JACKSET REVERSED	NO
21			LONG TURNING JACKSCREWS (2)	NO
22			LONG TURNING JACKSOCKETS (2)	NO
31		3	EX. LONG TURNING JACKSET	NO
38			EX. LONG TURNING JACKSET REVERSED	NO
44			EX. LONG TURNING JACKSCREWS (2)	NO
45			EX. LONG TURNING JACKSOCKETS (2)	NO
25	H	4	HEX TURNING JACKSET	/138
26			HEX TURNING JACKSET REVERSED	NO
27			HEX TURNING JACKSCREWS (2)	NO
28			HEX TURNING JACKSOCKETS (2)	NO
58		5	SHORT HEX/SLOT TURNING JACKSET	NO