

**Introduction**

The cost of EMI/RFI control has dropped dramatically with the introduction of Amphenol Canada's new FCC Series of filtered modular jacks, D-subminiature and Micro-Ribbon. At less than half the cost of previous industry levels, the FCC Series products have already solved EMI/RFI problems for a host of electronic equipment designers. These filtered connectors are useful for dealing with the two main EMI/RFI control issues.

**FCC Compliance**

FCC Docket 20780, Part 15, Subpart J imposes electromagnetic radiation emission limitations upon

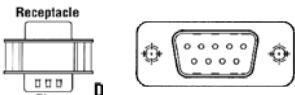
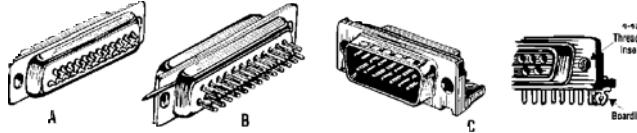
manufacturers of both Industrial (Class A) and Commercial (Class B) products. The FCC Series of filtered connectors are instrumental in passing these requirements because the chief cause of noncompliance is traceable to noise radiated from the I/O cables. A filtered connector at the I/O port removes the noise before it exits the system.

**Noise Protection**

Unwanted EMI/RFI noise or electrostatic discharge can be removed from an I/O cable if a filtered connector is used at the I/O port. This prevents false signals and protects the equipment from damaging voltage spikes thereby greatly enhancing device immunity from external effects.

**FCC17 Series — Filtered D-Sub Connectors**

Designed to provide EIA RS-232 and RS-449 compatibility. Intermediate with standard non-filtered Amphenol 17 Series D-Subs and connectors meeting MIL-C-24308. **Materials.** **Shell:** High strength zinc diecast or stamped steel. **Contacts:** Phosphor bronze. **Inserts:** High strength thermoplastic material (complies with UL flammability requirements of 94V-0 per UL-STD-94). **Finish.** **Shell:** Bright tin plating per MIL-T-10727. **Contacts:** 15  $\mu$  gold plating per MIL-G-45204 on contact area over 100  $\mu$  nickel plating. **Operating Temperature:** -40°C to +85°C.

**.318 (Footprint) Right Angle PCB with 4-40 Thread (Plug) — Fig. C**

Stock No.	Mfr.'s Type	No. of Contacts	CAP (pF)	EACH		
				1-9	10-49	50-99
625-0005	FCC17-E09PM-210	9	470	10.98	9.98	9.15
625-0010	FCC17-E09PM-240	9	820	10.89	9.98	9.21
625-0015	FCC17-A15PM-210	15	470	14.60	13.38	12.35
625-0020	FCC17-A15PM-240	15	820	14.74	13.52	12.48
625-0025	FCC17-B25PM-210	25	470	16.73	15.44	14.34
625-0030	FCC17-B25PM-240	25	820	17.02	15.71	14.59
625-0035	FCC17-C37PM-210	37	470	22.98	21.22	19.70
625-0040	FCC17-C37PM-240	37	820	23.41	21.61	20.06

**Solder Cup (Plug) — Fig. A**

Stock No.	Mfr.'s Type	No. of Contacts	CAP (pF)	EACH		
				1-9	10-49	50-99
625-0045	FCC17-E09SM-210	9	470	11.91	10.91	10.07
625-0050	FCC17-E09SM-240	9	820	12.24	11.13	10.20
625-0055	FCC17-A15SM-210	15	470	15.50	14.31	13.29
625-0060	FCC17-A15SM-240	15	820	15.49	14.20	13.10
625-0065	FCC17-B25SM-210	25	470	18.73	17.17	15.85
625-0070	FCC17-B25SM-240	25	820	19.03	17.44	16.10
625-0075	FCC17-C37SM-210	37	470	30.52	28.17	26.16
625-0080	FCC17-C37SM-240	37	820	30.92	28.54	26.51

**Straight PCB (Plug) — Fig. B**

Stock No.	Mfr.'s Type	No. of Contacts	CAP (pF)	EACH		
				1-9	10-49	50-99
625-0085	FCC17-E09PE-210	9	470	11.65	10.75	9.98
625-0090	FCC17-E09PE-240	9	820	11.65	10.75	9.98
625-0095	FCC17-A15PE-210	15	470	14.13	13.04	12.11
625-0100	FCC17-A15PE-240	15	820	14.13	13.04	12.11
625-0105	FCC17-B25PE-210	25	470	16.63	15.35	14.25
625-0110	FCC17-B25PE-240	25	820	16.63	15.35	14.25
625-0111	FCC17-C37PE-210	37	470	24.12	22.27	20.68
625-0112	FCC17-C37PE-240	37	820	24.12	22.27	20.68

**Straight PCB (Receptacle) — Fig. B**

Stock No.	Mfr.'s Type	No. of Contacts	CAP (pF)	EACH		
				1-9	10-49	50-99
625-0115	FCC17-E09SE-210	9	470	11.65	10.75	9.98
625-0120	FCC17-E09SE-240	9	820	11.65	10.75	9.98
625-0125	FCC17-A15SE-210	15	470	14.13	13.04	12.11
625-0130	FCC17-A15SE-240	15	820	14.13	13.04	12.11
625-0135	FCC17-B25SE-210	25	470	16.63	15.35	14.25
625-0140	FCC17-B25SE-240	25	820	16.63	15.35	14.25
625-0145	FCC17-C37SE-210	37	470	24.12	22.27	20.68
625-0150	FCC17-C37SE-240	37	820	24.12	22.27	20.68

**RJ Vista™ High Speed  
RJ-45 Modular Jacks**

RJ Vista™ is a family of single and multiport modular jack connectors with built-in LEDs, designed for Category 5 performance. This product is ideal for LAN applications such as adapter cards and routers. Shielded and non-shielded versions are available, with a variety of LED colors, and ports. U.L. File #E135615, CSA File #LR68598.

**Materials.** **Shield:** Copper alloy/tin-lead plated. **Contacts:** Phosphor bronze; 50  $\mu$  (1.27 microns) gold over nickel on mating surfaces, tin/lead on contact tails. **Insert:** Thermoplastic (complies with UL94V-0). **Current Rating:** 1.5 amps. **Voltage Rating:** 125 VAC.

**Non-Shielded — 8 Contacts**

Stock No.	Mfr.'s Type	LED 1	LED2	EACH		
				1-49	50-99	100-249
625-0355	RJHS-5080	None	None	1.13	.90	.75
625-0360	RJHS-5081	Green	Yellow	1.32	1.04	.86
625-0365	RJHS-5084	Yellow	Green	1.32	1.04	.86
625-0370	RJHS-5085	Green	Green	1.39	1.10	.91

**Shielded — 8 Contacts**

Stock No.	Mfr.'s Type	LED 1	LED2	1-49	50-99	100-249
625-0375	RJHS-5380	None	None	1.82	1.46	1.21
625-0380	RJHS-5381	Green	Yellow	2.11	1.69	1.41
625-0385	RJHS-5384	Yellow	Green	2.00	1.60	1.34
625-0390	RJHS-5385	Green	Green	2.11	1.69	1.41

**Filtered and Shielded  
Modular Jacks**

The FRJ series of Shielded and Filtered Modular Jacks offers low cost and effective EMC control within standard RJ-45 connector footprints. EMC control is offered by a completely shielded connector and/or with the use of a high resistivity, high impedance ferrite block. No board layout changes are required for its use. Simply replace the standard non-filtered connector for superior EMC performance.

**Materials.** **Shield:** Copper alloy. **Contacts:** Phosphor bronze; 30  $\mu$  (0.76 microns) gold over nickel. **Insert:** Thermoplastic (complies with UL 94V-0). **Filter:** High impedance, high resistivity, ferrite block. **Electrical.** **Current Rating:** 1.5 amps. **Voltage Rating:** 125 volts AC. **UL File No.:** E135615. **CSA File No.:** LR68598-11.