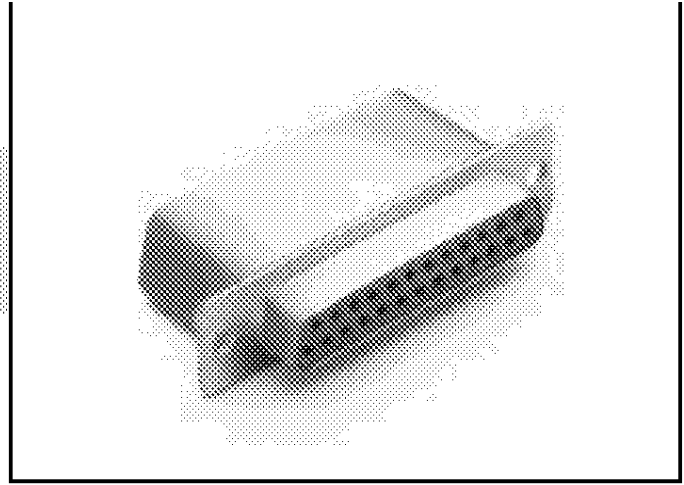


# MIL-C-24308, Extended Shell D-Subminiature



All extended shell connectors are manufactured by adding filters to a standard MIL qualified connector. The filtering is achieved by extending the connector with the use of a backshell and placing either planar or tubular capacitors in the backshell. Spectrum will always keep the extension to a minimum.

## Custom Designs

This part of the catalog is very custom in nature. If you do not see what you require for your application, contact the factory as we will be able to satisfy your needs.

## Materials and Finishes

Front shell..... Steel, cadmium plate with yellow chromate finish per QQ-P-416  
 Backshell ..... Steel, Nickel Plate  
 Contacts ..... Copper alloy, gold plate per MIL-G-45204 Type 1, Grade C

## Ordering Information

Available connector styles and shell sizes for this MIL series are shown on the following pages. Refer to these pages and the information below to develop your connector part number.

**1255**

D-sub connector

**XXX**

Engagement type (pin or socket) and Number of contacts 9, 15, 25, 37, 50 See page 163

**YYYY**

Item number termination type and capacitance (see below)

## Termination and Capacitance

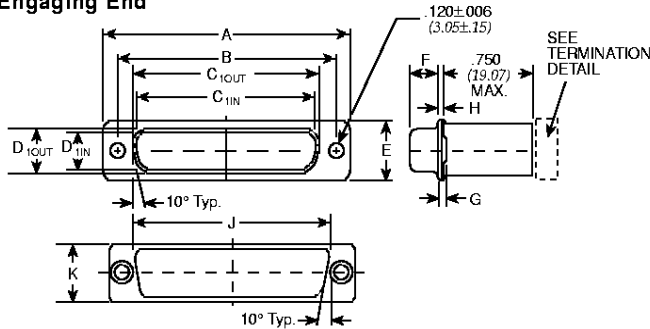
YYYY				Schem.	Capacitance min. @ 25°C .1-1.0 VRMS 1KHz	Working Voltage		I.R. G @ WVDC, 120 sec.	D.W.V. (VDC)
SLDR Cup Fig. A	PCB Fig. B	Wire Wrap Fig. C	90° PCB Fig. D			WVDC			
						85°C	125°C		
0001	0021	0041	0081	Pi	100 pF	200	100	5.0	600
0002	0022	0042	0082	Pi	300 pF	200	100	5.0	600
0003	0023	0043	0083	Pi	1000 pF	200	100	5.0	600
0004	0024	0044	0084	Pi	3000 pF	200	100	1.0	500
0005	0025	0045	0085	Pi	.01 μF	200	100	1.0	300
0006	0026	0046	0086	Pi	.03 μF	150	100	1.0	300
0007	0027	0047	0087	C	100 pF	350	200	5.0	600
0008	0028	0048	0088	C	300 pF	350	200	5.0	600
0009	0029	0049	0089	C	1000 pF	200	100	5.0	600
0010	0030	0050	0090	C	3000 pF	200	100	1.0	500
0011	0031	0051	0091	C	.01 μF	100	80	1.0	300
0012	0032	0052	0092	C	.03 μF	70	50	1.0	300
0013	0033	0053	0093	C	.1 μF	70	50	1.0	140
0014	0034	0054	0094	Pi	.004 μF	200	100	1.0	500
0015	0035	0055	0095	Pi	2000 pF 5000	200	100	1.0	600
0016	0036	0056	0096	Pi	500 pF	350	200	5.0	600
0017	0037	0057	0097	Pi	1500 pF	350	200	1.0	600
0018	0038	0058	0098	C	.05 μF	50	28	1.0	100
0020	0040	0060	0100	Pi	.1 μF	50	28	1.0	100

For cut-off frequency and insertion loss data see page 136.

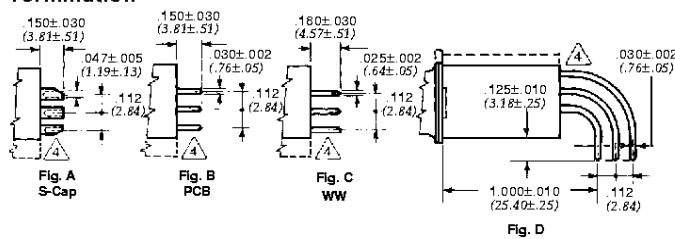
MIL-C-24308, Extended Shell

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## Engaging End



## Termination



## Spectrum Control Advantages

- **Retrofit existing connectors** - We can add filters to customer supplied connectors, saving time during prototype phase and expediting system evaluation.
- **Design flexibility and quality assurance** - We are vertically integrated with ceramic capacitors, enabling us to offer a broad selection of this critical component and ensuring design versatility and manufacturing control.
- **Prototypes** - Our EMI filtering expertise and large capacitor inventory allow us to quickly provide a working sample of your filtered connector.
- **Economy and turnaround** - Most components we utilize are standards, minimizing our tooling requirements and providing cost savings and a shorter lead time.
- **MIL and commercial applications** - reduce program costs by utilizing our extended shell connectors for both MIL spec and commercial grade connectors.
- **Reduce testing and qualification** - use of a QPL'd connector interface can expedite your approval process. In addition, we can filter any series of connectors. . . eliminating concerns over filter connector availability.

## Socket Engagement/Number of Contacts

-XXX-	No. of Lines	A ±.015 (0.38)	B ±.005 (0.13)	C,out ±.005 (0.13)	D,out ±.005 (0.13)	E ±.015 (0.38)	F ±.005 (0.13)	G +.015 (0.38)	H ±.010 (0.25)	J Max	K ±.015 (0.38)	Insert Arrangement
-128-	9	1.213 (30.81)	.984 (24.99)	.643 (16.35)	.311 (7.90)	.494 (12.55)	.243 (6.17)	.060 (1.52)	.045 (1.14)	.793 (20.14)	.456 (11.58)	MS18273-1
-129-	15	1.541 (39.19)	1.312 (33.32)	.971 (24.66)	.311 (7.90)	.494 (12.55)	.243 (6.17)	.060 (1.52)	.045 (1.14)	1.114 (28.30)	.456 (11.58)	MS18274-1
-130-	25	2.088 (53.04)	1.852 (47.04)	1.511 (38.38)	.311 (7.90)	.494 (12.55)	.243 (6.17)	.060 (1.52)	.045 (1.14)	1.658 (42.11)	.456 (11.58)	MS18275-1
-131-	37	2.729 (69.32)	2.500 (63.50)	2.159 (54.84)	.311 (7.90)	.494 (12.55)	.243 (6.17)	.060 (1.52)	.045 (1.14)	2.305 (58.55)	.456 (11.58)	MS18276-1
-132-	50	2.635 (66.93)	2.406 (61.11)	2.064 (52.43)	.423 (10.74)	.605 (15.37)	.243 (6.17)	.060 (1.52)	.045 (1.14)	2.215 (56.26)	.573 (14.55)	MS18277-1

## Pin Engagement/Number of Contacts

-XXX-	No. of Lines	A ±.015 (0.38)	B ±.005 (0.13)	C,in ±.005 (0.13)	D,in ±.005 (0.13)	E ±.015 (0.38)	F ±.005 (0.13)	G +.015 (0.38)	H ±.010 (0.25)	J Max	K ±.015 (0.38)	Insert Arrangement
-028-	9	1.213 (30.81)	.984 (24.99)	.666 (16.92)	.329 (8.37)	.494 (12.55)	.234 (5.94)	.045 (1.14)	.030 (.76)	.793 (20.14)	.456 (11.58)	MS18273-1
-029-	15	1.541 (39.19)	1.312 (33.32)	.994 (25.25)	.329 (8.36)	.494 (12.55)	.234 (5.94)	.045 (1.14)	.030 (.76)	1.114 (28.30)	.456 (11.58)	MS18274-1
-030-	25	2.088 (53.04)	1.852 (47.04)	1.534 (38.96)	.329 (8.36)	.494 (12.55)	.229 (5.82)	.045 (1.14)	.030 (.76)	1.658 (42.11)	.456 (11.58)	MS18275-1
-031-	37	2.729 (69.32)	2.500 (63.50)	2.182 (55.42)	.329 (8.36)	.494 (12.55)	.229 (5.82)	.045 (1.14)	.030 (.76)	2.305 (58.55)	.456 (11.58)	MS18276-1
-032-	50	2.635 (66.93)	2.406 (61.11)	2.079 (52.81)	.436 (11.09)	.605 (15.37)	.229 (5.82)	.045 (1.14)	.030 (.76)	2.215 (56.26)	.573 (14.55)	MS18277-1

Dimensions in inches (mm)