

Spectrum Control line of Mini-MIL circular connectors are small and lightweight offering space and weight savings while providing equivalent performance to standard MIL-DTL-38999 connectors. These connectors are available filtered with C, Pi or mixed capacitance, or unfiltered, and can be customized to satisfy various mechanical and electrical requirements. These connectors are ideal for military, industrial and medical applications where space restrictions do not allow for larger 38999 connectors.



Specifications

Engagement Types

- Double-start ACME thread
- Triple-start ACME thread

Termination Types

- PC tail
- Solder cup
- Crimp removal

Receptacle Types

- Flange mount
- Jam nut

Mechanical Specifications

- **Shell:** six shell sizes available in either pin or socket contact genders
- **Shell Materials:** aluminum, stainless steel
- **Contacts:** pin and socket contacts are available in various combinations of size 23 to size 12

Electrical Characteristics with C Filter

Capacitance (pF, GMV)*	Working Voltage		Dielectric Withstanding Voltage (VDC)	Minimum Insertion Loss (dB)					
	DC 85°C	AC 85°C		Cutoff Freq. MHz	1 MHz	10 MHz	100 MHz	500 MHz	1000 MHz
1,000	200	115	500	5	-	4	21	34	39
2,000	200	115	500	1	-	9	26	39	44
3,000	200	115	500	1	-	12	30	43	48
5,000	200	115	500	1	1	16	34	46	52
7,000	200	115	500	1	3	19	37	49	55
10,000	200	115	500	1	4	21	39	52	57
20,000	100	-	250	0.50	9	26	44	57	58

Electrical Characteristics with Pi Filter

Capacitance (pF, GMV)*	Working Voltage		Dielectric Withstanding Voltage (VDC)	Minimum Insertion Loss (dB)					
	DC 85°C	AC 85°C		Cutoff Freq. MHz	1 MHz	10 MHz	100 MHz	500 MHz	1000 MHz
1,000	200	115	500	5	-	4	28	54	65
2,000	200	115	500	1	-	8	39	65	70
3,000	200	115	500	1	-	11	47	70	70
5,000	200	115	500	1	1	14	54	70	70
7,000	200	115	500	1	3	18	60	70	70
10,000	200	115	500	1	4	22	64	70	70
20,000	100	-	250	0.50	9	33	70	70	70