

# Mini-MIL Connectors

API's Spectrum Control line of new 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:

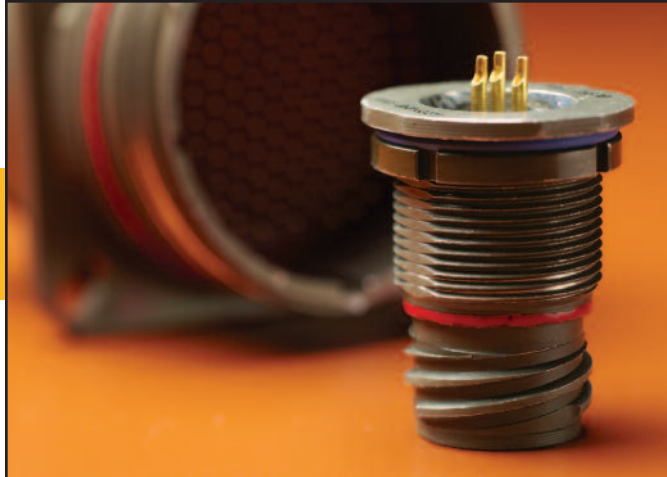
- Double-start ACME thread
- Triple-start ACME thread

### Termination Types:

- PC tail
- Solder cup
- Crimp removable

### Receptacle Types:

- Flange mount
- Jam nut



## Mechanical Specifications

*Shell* . . . . . Six shell sizes are 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		Cut-Off Freq. MHz	1 MHz	10 MHz	100 MHz	500 MHz	1,000 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	.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		Cut-Off Freq. MHz	1 MHz	10 MHz	100 MHz	500 MHz	1,000 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	.50	9	33	70	70	70

\* Custom values available.