

# Easy Mate Jr. Filter Plates

APITech expanded its popular Easy Mate family by adding two more package sizes. These new sizes are lower profile and facilitate installation of feedthrough filters into small hardware applications such as PCS linear power amplifiers and RF transmitters. The Easy Mate Jr. is available in two plate lengths, .990" and 1.240", and in standard (.100") and high-density centers (2.00mm).

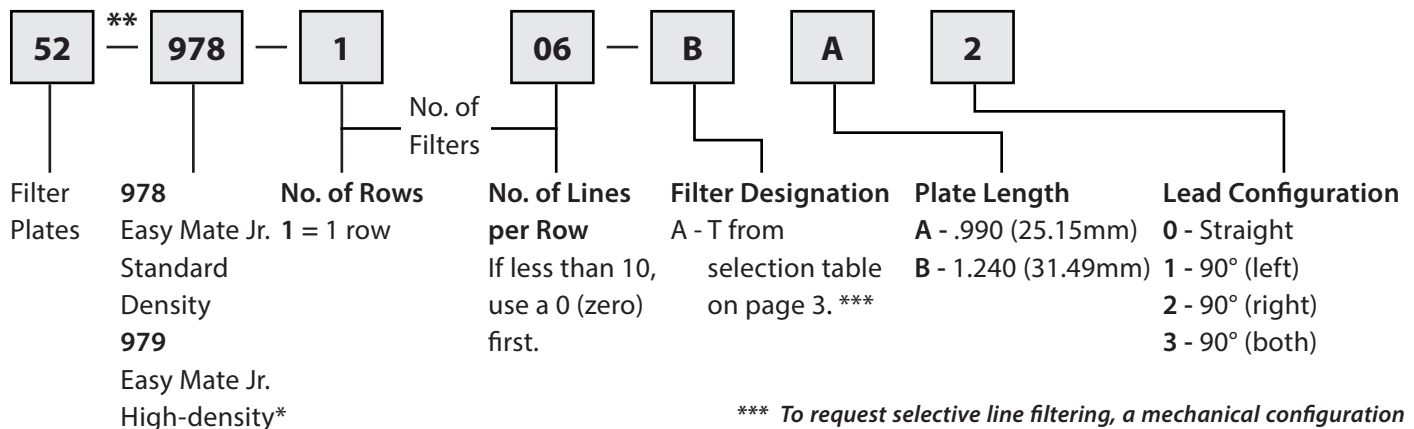
## Easy Mate Jr. Advantages

- Reduces installation time and overall cost
- Increase flexibility with standard density centers (.100") or high-density centers (2.00mm)
- Improves overall quality and reliability
- Multiple finger ground contacts provide excellent EMIL filtering from 5 MHz to 18 GHz
- Outperforms surface mount devices
- Maximize real estate on PCB
- Mixed capacitance values and schematics
- Ideal for isolation of electronic compartments
- RoHS compliant versions available

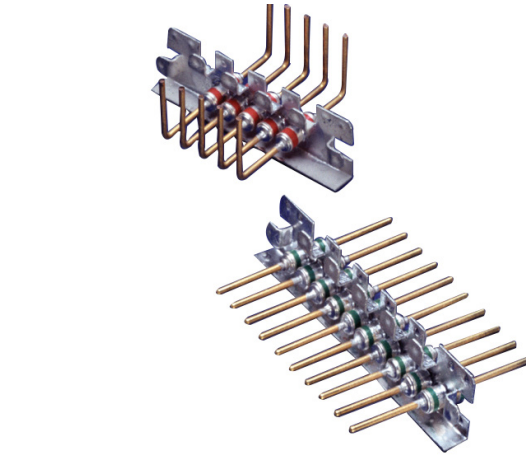
## Ordering Information

Example: **52-978-106-BA2**

The part number shown represents an Easy Mate Jr. filter plate with 6 filters. Filters are C style with a capacitance value of 100pF. The plate length is .990", and the leads are bent 90° to the right side.



\* Maximum capacitance up 400pF C style filter.  
\*\* Replace "-" with "F" for RoHS compliant version.



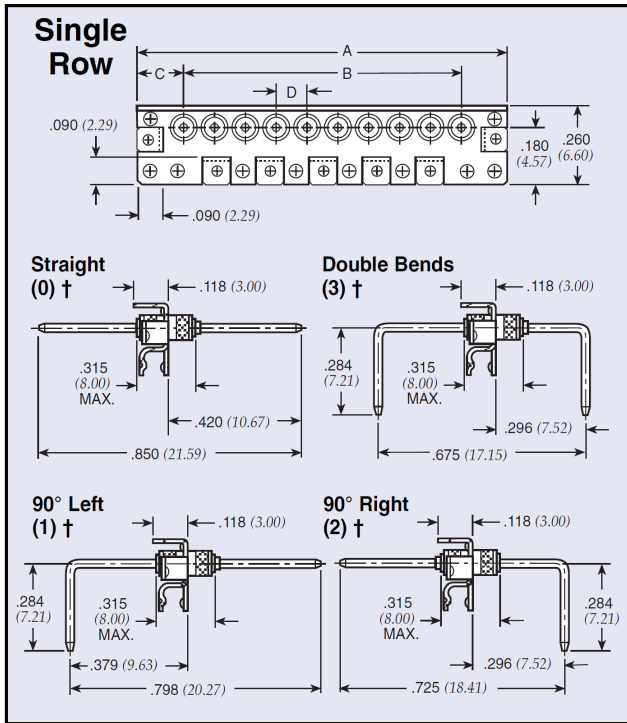
## Mechanical Specifications

Base Plate	Beryllium copper
Base Plate Thickness	.010 inches (.25mm)
Plating	Tin RoHS version will be silver
Lead Material	Copper alloy
Lead Plating	Gold plate
Lead Diameter	ø .025" (.64mm) for 0.100" centers (2.54mm) ø .020" (.51mm) for 0.079" centers (2.00mm)
Current Rating	5 Amps for .025" ø (.64mm) 3 Amps for .020" ø (.51mm)

\*\*\* To request selective line filtering, a mechanical configuration or material specification not shown in this catalog, please contact APITech. We will review your request and provide you with a part number.

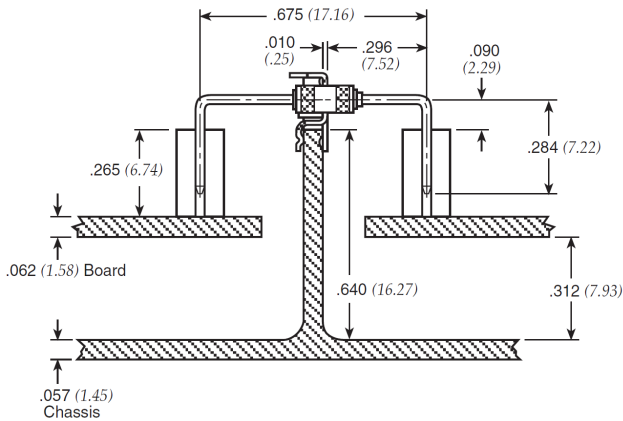
# Easy Mate Jr. Filer Plates

**Dimensions:** inches and (mm)



† Refers to lead configuration for part number/ordering information.

## Typical Mounting Application



APITech's patented Easy Mate design.

## Standard Density Centers .100" (D)

Plate length (A)	No. of filtered lines per row	52-960-XXX-XXX	
		B	C
.990 (25.15)	2	0.1 (2.54)	0.395 (10.03)
	3	0.2 (5.08)	0.395 (10.03)
	4	0.3 (7.62)	0.295 (7.49)
	5	0.4 (10.16)	0.295 (7.49)
	6	0.5 (12.70)	0.195 (4.95)
1.24 (31.49)	7	0.6 (15.24)	0.195 (4.95)
	2	0.1 (2.54)	0.570 (14.48)
	3	0.2 (5.08)	0.470 (11.94)
	4	0.3 (7.62)	0.470 (11.94)
1.24 (31.49)	5	0.4 (10.16)	0.370 (9.40)
	6	0.5 (12.70)	0.370 (9.40)
	7	0.6 (15.24)	0.270 (6.86)
	8	0.7 (17.78)	0.270 (6.86)
	9	0.8 (20.32)	0.170 (4.32)
	10	0.9 (22.86)	0.170 (4.32)

## High-Density Centers 2.00mm (D)

Plate length (A)	No. of filtered lines per row	52-960-XXX-XXX	
		B	C
.990 (25.15)	2	0.079 (2.54)	0.395 (10.03)
	3	0.157 (5.08)	0.395 (10.03)
	4	0.236 (7.62)	0.295 (7.49)
	5	0.315 (10.16)	0.295 (7.49)
	6	0.394 (12.70)	0.195 (4.95)
1.24 (31.49)	7	0.472 (15.24)	0.195 (4.95)
	2	0.079 (2.00)	0.580 (14.75)
	3	0.157 (4.00)	0.502 (12.75)
	4	0.236 (6.00)	0.502 (12.75)
1.24 (31.49)	5	0.315 (8.00)	0.423 (10.75)
	6	0.394 (10.00)	0.423 (10.75)
	7	0.472 (12.00)	0.344 (8.75)
	8	0.551 (14.00)	0.344 (8.75)
	9	0.630 (16.00)	0.266 (6.75)
	10	0.709 (18.00)	0.266 (6.75)

## Easy Mate Jr. Chassis Cut-Out Design

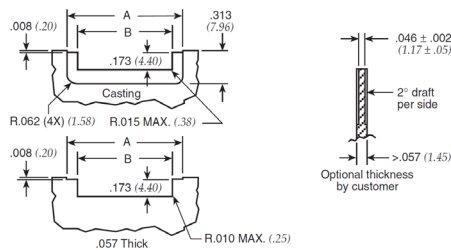


Plate length	A	B
.990 (25.15)	1.015 (25.78)	0.834 (21.18)
1.24 (31.49)	1.265 (32.13)	1.084 (27.53)

# Filter Plate Filter Selection

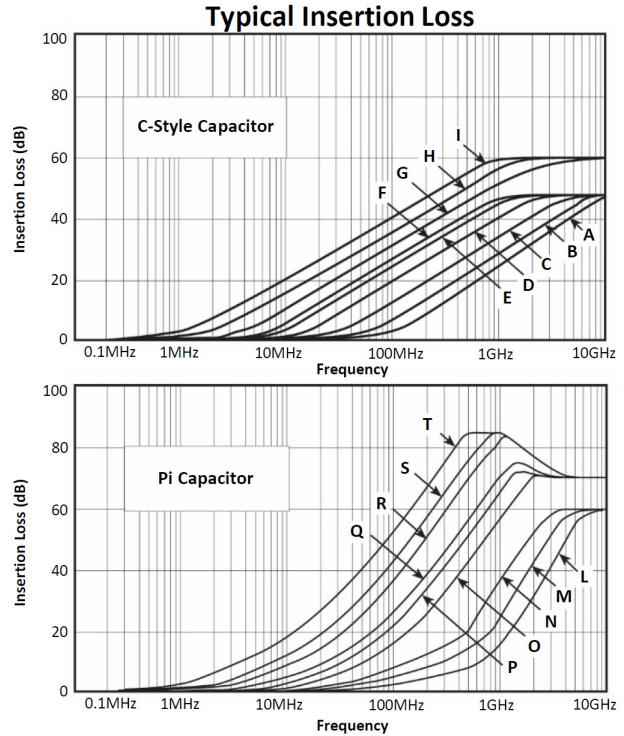
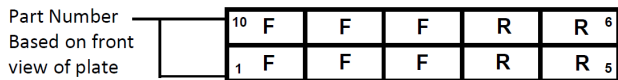
## EMI Filter Performance

The electrical characteristics table and insertion loss graphs indicate the performance of feedthrough capacitors and Pi type filters. Utilize this information to specify the EMI filtering components included in your filter plate.

## Custom Filtering

APItech filter plates are engineered to accommodate selective line filtering. Several different types of filters may be specified in a single, easy to install filter plate, allowing you to facilitate a wide range of filtering requirements.

For select line filtering, provide a sketch indicating the filters and positions required. The example below represents a 10-pin, 2-row plate with six 1000 pF feedthrough capacitors and four 1700 pF Pi type filters.



The above curves represent the application of proper grounding fundamentals.

Filter Designation	Filter Circuits	Capacitance		3 dB Max Cut-off Frequency (MHz)*	Working Voltage DC - 55°C to +125°C	Minimum Insertion Loss – Decibels (dB) 50 ohm system per MIL-STD-220 (no load)							
		Value	Tolerance			5 MHz	10 MHz	20 MHz	50 MHz	100 MHz	200 MHz	500 MHz	1 GHz
A	C	68pF	±20%	77	100V	-	-	-	-	-	3	10	16
B	C	100pF	±20%	53	100V	-	-	-	-	1	6	14	19
C	C	135pF	+100/-0%	23	100V	-	-	-	1	5	10	16	20
D	C	470pF	±20%	11	100V	-	-	2	7	13	19	25	27
E	C	820pF	±20%	6	100V	-	2	6	12	18	24	30	33
F	C	1000pF	±20%	5	100V	-	3	7	14	20	26	32	35
G	C	1500pF	±20%	3.5	100V	1	4	10	16	22	29	36	37
H	C	2500pF	+100/-0%	1.3	100V	5	11	17	23	29	35	38	40
I	C	4000pF	+100/-0%	0.8	100V	9	15	21	27	34	38	42	46
J	Insulated	10pF	Max.	635	100V	-	-	-	-	-	-	-	-
K	Grounded Insert					-	-	-	-	-	-	-	-
L	Pi	68pF	±20%	65	100V	-	-	-	-	1	6	17	23
M	Pi	100pF	±20%	46	100V	-	-	-	-	2	9	22	28
N	Pi	135pF	+100/-0%	25	100V	-	-	-	1	6	17	26	34
O	Pi	470pF	±20%	11	100V	-	-	-	9	18	22	36	43
P	Pi	820pF	±20%	6	100V	-	-	4	13	23	31	45	52
Q	Pi	1000pF	±20%	5	100V	-	2	7	16	24	36	51	59
R	Pi	1700pF	+100/-0%	1.9	100V	1	6	14	28	35	49	64	69
S	Pi	2500pF	+100/-0%	1.3	50V	4	9	16	28	41	54	70	70
T	Pi	5000pF	+100/-0%	0.7	100V	9	15	28	41	53	66	70	70

\* 3dB cut-off frequency calculated at the maximum capacitance.  
 \*\* For high-density centers (2mm) only C style filters are available, to maximum of 4000pF.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [EMI Feedthrough Filters](#) category:*

*Click to view products by [Api Technologies](#) manufacturer:*

Other Similar products are found below :

[FN7611-63-M6](#) [FN7612-10-M3](#) [FN7660-100-M8](#) [1202F-054](#) [1609991-8](#) [1609992-2](#) [16DFC6-C](#) [16FFD6-HE](#) [2-1609992-2](#) [2443-007-X5S0-102MLF](#) [2443-007-X5W0-502ZLF](#) [1609990-8](#) [1609991-3](#) [1609992-1](#) [1609992-3](#) [1609993-1](#) [1609993-7](#) [200AFC6-P](#) [200DFC6-P](#) [FN7510-100-M8](#) [FN7510-32-M4](#) [FN7562-100-M8](#) [FN7562-200-M10](#) [FN7563-100-M8](#) [FN7611-10-M3](#) [FN7612-63-M6](#) [2450-001-X5U0-102PLF](#) [2499-003-X5S0-152MLF](#) [32AFC6-H](#) [4100-000LF](#) [4201-050LF](#) [4204-001LF](#) [4253-002LF](#) [4305-001LF](#) [4306-019LF](#) [4101-004LF](#) [4201-003LF](#) [4208-000LF](#) [4600-067](#) [094-6526-0000](#) [100AFC6-G](#) [10AFC6-B](#) [10DFC6-C](#) [1-1609990-3](#) [1-1609990-7](#) [1-1609992-8](#) [1-1609990-1](#) [1-1609991-1](#) [FN7510-16-M4](#) [FN7514-32-M4](#)