

Series 806 Mil-Aero Connectors



240-806-21 Receptacles, Jam-nut, PC Tail, Threaded Standoff



Ceramic planar array C and Pi filters. Jam-nut panel mounting. PC tail with board mounting flange. 240-806-21 filtered receptacles save size and weight compared to legacy aerospace-grade EMI/RFI filter connectors. These high-performance connectors are suitable for areas subject to high vibration, altitude, and moisture as well as temperature ranges from -55°C to +125°C. Size 20HD and size 22HD contacts. Board mounting flange has threaded standoffs and orientation post.

Features

- Ceramic planar filter array
- PC tail contacts
- High density #20HD and #22HD arrangements for reduced size and weight plus size #16, #12, #8 standard and hybrid layouts
- Aerospace-grade materials, construction

Specifications

- Operating temperature: -55°C to +125°C
- Dielectric withstanding voltage: 300 VDC
- Current rating
#20HD contacts: 5 A max.
#22HD contacts: 3 A max.
#16 contacts: contact factory
#12 contacts: contact factory
#8 contacts: contact factory
- Mating durability: 500 cycles

Connector Construction

- Shell, jam-nut: aluminum or stainless steel
- Contacts: copper alloy, gold plated
- Seals: fluorosilicone
- Insulator: high grade rigid dielectric

Table 2 Capacitance Class		
Class	Capacitance Range (pF)	
	Filter Type	
	P (Pi-Section)	C, L, M (C, L-C, C-L)
A	38,000 - 56,000	19,000 - 28,000
B	32,000 - 45,000	16,000 - 22,500
C	18,000 - 33,000	9,000 - 16,500
D	8,000 - 12,000	4,000 - 6,000
E	3,300 - 5,000	1,650 - 2,500
F	800 - 1,300	400 - 650
G	400 - 600	200 - 300
J	70 - 120	35 - 60

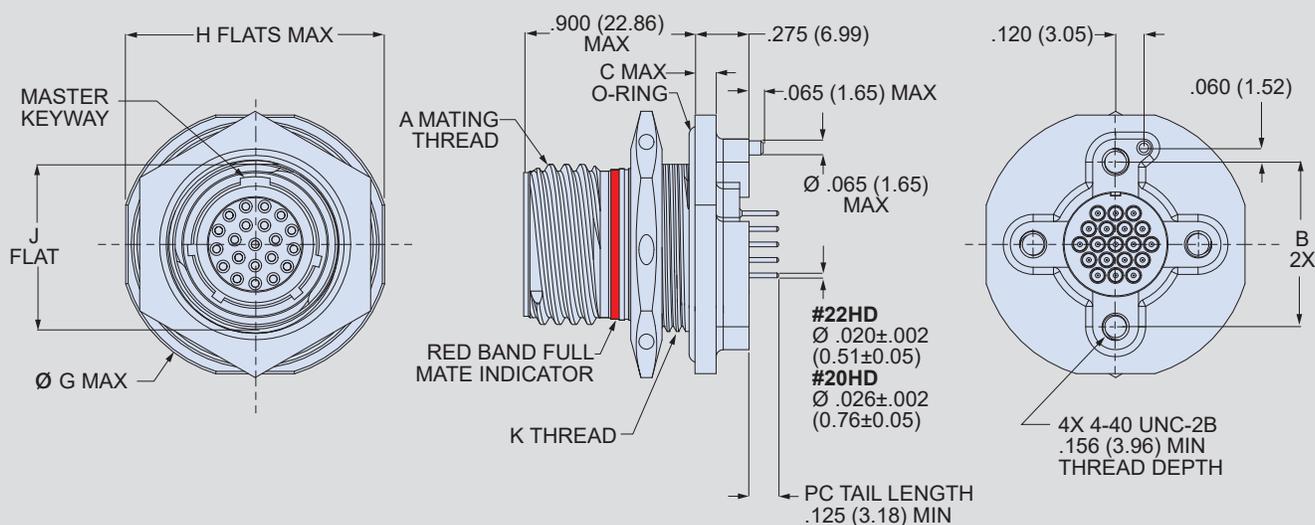
How To Order							
sample part number	240-806-21	ME	8-7	PP	P	C	A
Product	240-806-21 = Filtered Receptacle, Board Mount						
Shell Material and Finish	ME = Aluminum, Electroless Nickel MT = Aluminum, Ni/PTFE ZR = Aluminum, Black Zinc-Nickel NF = Aluminum, Olive Drab Cadmium Z1 = Stainless Steel, Passivated						
Arrangement Number (Shell Size - Insert Arr.)	See Table 1						
Contact Type	PP = Pin, PC Tail SP = Socket, PC Tail						
Filter Type (Table 3)	P = Pi Filter C = C Filter L = L - C Filter M = C - L Filter						
Capacitance Class (Table 2)	A B C D E F G J						
Polarizing Position	A B C D E F; (see reference section for polarizing table)						

Table I: Shell Size - Insert Arrangement																	
Contact Layout	Number of Contacts					Contact Layout	Number of Contacts					Contact Layout	Number of Contacts				
	22HD	20HD	16	12	8		22HD	20HD	16	12	8		22HD	20HD	16	12	8
7-3	3					22-69		69				16-2					2
8-4	4					24-92		92				18-3					3
8-7	7					8-1			1			20-4					4
9-11	11					10-2			2			22-5					5
10-15	15					11-4			4			24-8					8
11-19	19					12-5			5			10-8A	6		2		
12-26	26					14-7			7			11-13	11		2		
14-39	39					16-12			12			12-27	26		1		
16-60	60					18-15			15			14-21	17		4		
18-85	85					20-22			22			16-41	37		4		
20-110	110					22-24			24			18-59	55		4		
22-140	140					24-35			35			11-14	13			1	
24-186	186					9-1				1		12-14	12			2	
8-3		3				12-2				2		14-22	20			2	
9-5		5				14-3				3		12-14	12			2	
10-8		8				16-4				4		16-42	40			2	
11-10		10				16-7				7		18-62	60			2	
12-15		15				18-8				8		14-20A	19				1
14-20		20				20-11				11		16-22	20				2
16-31		31				22-13				13		18-21	18				3
18-41		41				24-19				19		20-28	24				4
20-55		55				10-1					1	22-44	40				4
												24-97	93				4

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240-806-21 Receptacle Dimensions

Shell Size	A Mating Thread	B	C Max	ØG Max	H Max	J Flat	K Thd x1.0-6g-0.100R
7	.4375-.067P-.2L-TS-2A	.489 (12.42)	.100 (2.54)	.908 (23.06)	.848 (21.54)	.463 (11.76)	M13
8	.5000-.067P-.2L-TS-2A	.534 (13.56)	.100 (2.54)	.980 (24.89)	.920 (23.37)	.536 (13.61)	M15
9	.5625-.067P-.2L-TS-2A	.579 (14.71)	.100 (2.54)	1.040 (26.42)	.980 (24.89)	.587 (14.91)	M16
10	.6250-.067P-.2L-TS-2A	.679 (17.25)	.100 (2.54)	1.110 (28.19)	1.050 (26.67)	.658 (16.71)	M18
11	.6875-.067P-.2L-TS-2A	.734 (18.64)	.100 (2.54)	1.160 (29.46)	1.110 (28.19)	.709 (18.01)	M19
12	.7500-.067P-.2L-TS-2A	.804 (20.42)	.100 (2.54)	1.230 (31.24)	1.170 (29.72)	.779 (19.79)	M21
14	.8750-.067P-.2L-TS-2A	.891 (22.63)	.100 (2.54)	1.360 (34.54)	1.320 (33.53)	.900 (22.86)	M24
16	1.0000-.067P-.2L-TS-2A	1.049 (26.64)	.100 (2.54)	1.515 (38.48)	1.444 (36.68)	1.022 (25.96)	M27
18	1.1250-.067P-.2L-TS-2A	1.148 (29.16)	.100 (2.54)	1.610 (40.89)	1.570 (39.88)	1.144 (29.06)	M30
20	1.2500-.067P-.2L-TS-2A	1.252 (31.80)	.128 (3.25)	1.850 (46.99)	1.760 (44.70)	1.285 (32.64)	M34
22	1.3750-.067P-.2L-TS-2A	1.369 (34.77)	.128 (3.25)	2.010 (51.05)	1.913 (48.59)	1.406 (35.71)	M37
24	1.5000-.067P-.2L-TS-2A	1.509 (38.33)	.128 (3.25)	2.195 (55.75)	2.070 (52.58)	1.547 (39.29)	M41

240-806-21 Jam-nut D-Hole Dimensions

Shell Size	ØA +0.005/-0.00 (+0.13/-0.00)	B +0.005/-0.00 (+0.13/-0.00)
7	.522 (13.26)	.224 (5.69)
8	.601 (15.27)	.256 (6.50)
9	.640 (16.26)	.287 (7.29)
10	.719 (18.26)	.318 (8.08)
11	.759 (19.28)	.350 (8.89)
12	.837 (21.26)	.381 (9.68)
14	.955 (24.26)	.443 (11.25)
16	1.073 (27.25)	.505 (12.83)
18	1.192 (30.28)	.568 (14.43)
20	1.349 (34.26)	.630 (16.00)
22	1.467 (37.26)	.693 (17.60)
24	1.624 (41.25)	.755 (19.18)

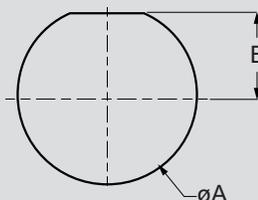


Table 3
Filter Types

C
Single capacitor with low self inductance
Pi
Dual capacitors with a single inductive element positioned between
L-C
Single capacitor and an inductive element
C-L
Single capacitor and an inductive element