



AVX solder-in style C and L section filters, utilize patented conductive polymer technology to provide effective attenuation in the RF to microwave frequency spectrum from 10MHz to 50GHz. Designed in accordance with MIL-PRF-28861, they perform well in high impedance circuits where large capacitance values are not practical. They are ideal for filtering signal/data lines of high impedance source and load systems. These filters are designed to be soldered into a package, bracket or bulkhead (and maintain hermeticity).

CHARACTERISTICS

- Miniature and Microminiature versions for Aerospace applications
- High temperature construction, withstands 300°C installation temperatures
- Rugged monolithic discoidal capacitor construction
- Custom lead lengths and capacitance values available on request
- Glass hermetic seal on one end with epoxy on the opposite end
- High purity gold plating provides excellent solderability or compatibility with thermal and ultrasonic wire bonding
- Rated DC current up to 10A
- NASA SSQ 21215-21218

HOW TO ORDER

ZZS ↓	2 ↓	C ↓	2 ↓	B ↓	103 ↓	H ↓
Style ZZ = (.118 Dia.) M28861/12 ZYS* = (.105 Dia.) ZXS* = (.075 Dia.) ZZS* = (.120 Dia.) ZS* = (.128 Dia.) M28861/12 ZR* = (.128 Dia.) M28861/12 YS* = (.165 Dia.) M28861/15 YR* = (.165 Dia.) M28861/15 XS* = (.250 Dia.) M28861/14 XR* = (.250 Dia.) M28861/14 WS* = (.400 Dia.) M28861/13 WR* = (.400 Dia.) M28861/13	Circuit 1 = C Section (Feed Thru) 2 = L-Section 8 = Grounded Feed Thru	Voltage A = 100 VDC B = 200 VDC C = 50 VDC E = 400 VDC/230 VAC OR 400 VDC K = 250 VDC L = 300 VDC OR 200 VDC/115 VAC M = 350 VDC N = 70 VDC Y = 300 VDC Z = 400 VDC X = 500 VDC	Options 1 = Copper (std. for non-hermetic) 2 = Nickel Iron (std.) 3 = Special 4 = Aluminum compatible with seating flange (std. lead) 5 = Aluminum compatible with seating flange (special lead) D = Aluminum compatible with centering flange (std. lead) E = Aluminum compatible with centering flange (special lead) F = Aluminum compatible special design Y = Solder	MIL-28861 Screening B = Class B S = Class S	3 Digit Capacitor Code (in pF)	H = Polyimide Y = Solder Z = Braze
<div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>*Glass Seal Orientation: S = Standard R = Reverse N = No Glass (Epoxy both Sides) M = Mid Flange</p> </div>						

Style	Capacitance Range (in pF if not indicated)					Current Rating	Circuit Available
	50VDC	100VDC	200VDC/115VAC	400VDC/230VAC	500VDC		
ZXS	5-5,600	5-1,800	5-1,000	—	—	1.5A	C
ZYS	5-22,000	5-8,200	5-4,700	5-2,700	—	2.5A	C
ZZS	5-27,000	5-10,000	5-5,600	5-3,300	5-1,800	5A	C, L
ZZ	5-27,000	5-10,000	5-5,600	5-3,300	5-1,800	5A	C
ZS/ZR	5-33,000	5-12,000	5-6,800	5-3,900	5-2,200	5A	C, L
YS/YR	5-68,000	5-27,000	5-18,000	5-10,000	5-6,800	5A	C, L
XS/XR	5pF-.39µF	5pF-.15µF	5pF-.1µF	5pF-.056µF	5pF-.033µF	10A	C, L
WS/WR	5pF-1.8µF	5pF-.68µF	5pF-.39µF	5pF-.22µF	5pF-.15µF	15A	C, L



AVX bolt-in style Pi filters, utilize discoidal capacitor technology to provide effective attenuation in the RF to microwave frequency spectrum from 10MHz to 26GHz.

Some versions offer large hex sizes which mean much higher capacitance levels are available and that a 125 VAC/400Hz rating can be offered for certain values.

In the "L" section version an internal ferrite bead element provides both inductance and series resistance which improves insertion loss and provides superior transient performance. They are ideal for filtering signal/data lines of high impedance source and load systems. These filters are designed to be mounted in a tapped bulkhead or with a standard nut and lock-washer provided.

CHARACTERISTICS (Varies with series)

- Miniature and Subminiature versions available
- Rugged monolithic discoidal capacitor construction
- Epoxy seal at both ends
- Conservatively rated for 125VAC/400Hz
- Pi design offers steeper insertion loss
- NASA SSQ 21215-21218

HOW TO ORDER

SB

Style

SXD = 1-64 Epoxy Sealed
 SYD = 2-56 Epoxy Sealed
 SZD = 2-56 Epoxy Sealed
 SA = 4-40 Epoxy Sealed
 SG = 6-32 Epoxy Sealed
 SB = 8-32 Epoxy Sealed
 SM = 8-32 Hermetic Sealed
 SH = 10-32 Epoxy Sealed
 SJ = 12-28 Epoxy Sealed
 SC = 12-32 Epoxy Sealed (.187 HEX)
 SP = 12-32 Epoxy Sealed (.250 HEX)
 SN = 12-32 Hermetic Sealed
 SL = 1/4-28 Epoxy Sealed
 SD = 5/16-24 Epoxy Sealed
 SF = 5/16-32 Epoxy Sealed

2

Circuit

1 = Feed Thru (C)
 2 = L-Section (L)
 3 = PI-Section (π)
 8 = Grounded Feed Thru

A

Voltage Rating

A = 100 VDC
 B = 200 VDC
 C = 50 VDC
 F = 500 VDC
 G = 1000 VDC
 H = 150 VDC
 J = 600 VDC
 K = 250 VDC
 L = 200 VDC/125 VAC
 M = 350 VDC
 N = 70 VDC
 X = 500 VDC
 Y = 300 VDC

1

Options

1 = Copper
 2 = Steel
 3 = Special Lead Design
 4 = Beryllium Copper
 G = Olean Exact Equivalent

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MIL-28861 Screening
 B = Class B
 S = Class S

103

3 Digit Capacitor Code (in pF)

Style	Capacitance Range (in pF if not indicated)					Current Rating	Circuit Available
	50VDC	100VDC	200VDC/115VAC	400VDC/230VAC	500VDC		
SXD	5-5,600	5-1,800	5-1,000	-	-	3A	C, L
SYD	5-6,200	5-2,200	5-1,200	-	-	3A	C, L
SZD	5-22,000	5-8,200	5-4,700	5-2,700	-	5A	C, L
SA	5-33,000	5-12,000	5-6,800	5-3,900	5-2,200	5A	C, L
SG	5-33,000	5-12,000	5-6,800	5-3,900	5-2,200	5A	C, L
SB/SM	5-33,000	5-12,000	5-6,800	5-3,900	5-2,200	10A	C, L, π
SH	5pF-.33 μ F	5pF-.12 μ F	5pF-.082 μ F	5pF-.047 μ F	5pF-.027 μ F	10A	C, L, π
SJ/SC/SP/SN	5pF-.33 μ F	5pF-.12 μ F	5pF-.082 μ F	5pF-.047 μ F	5pF-.027 μ F	10A	C, L, π
SL/SD/SF	5pF-1.5 μ F	5pF-.56 μ F	5pF-.39 μ F	5pF-.22 μ F	5pF-.12 μ F	25A	C, L, π



AVX cylindrical style EMI filters offer effective filtering from 14KHz to 10GHz. Sealing options include epoxy sealed at both ends to optimize volumetric efficiency and cost, and a glass to metal hermetic seal version for severe moisture environments. They are designed for bulkhead mounting in a slotted hole with a nut and lockwasher supplied. These are ideal for low to medium impedance circuits where large amounts of capacitance to ground can be tolerated. In the "L" section version, an internal wound toroidal or ferrite bead element provides both inductance and series resistance which improves insertion loss at lower current ratings as well as superior transient performance.

CHARACTERISTICS (Varies with series)

- High DC current rating up to 25A
- Impervious to high moisture, solvents and other severe environmental conditions
- High capacitance values
- A 230VAC "T" section can handle very high pulse currents
- NASA SSQ 21215-21218

HOW TO ORDER

G	K	2	A	A	-	S07	X
Basic Style	Thread Type	Circuit	Voltage	Thread Length	MIL-28861 Screening		Plating Finish
A = Button Type (.410 Dia.) B = Button Type (.375 Dia.) C = Extended Button (.375 Dia.) G = .375 Dia. J = .690 Dia. H = .410 Dia. Q = Special	K = 1/4-28 Herm. Seal L = 1/4-28 Epoxy Seal M = 8-32 Herm. Seal N = 12-32 Herm. Seal T = 1/4-28 Post Terminal (Both Ends) V = 1/4-28 Post and Flag Terminal X = 1/4-28 Hex Adapter Y = 5/8-24 Epoxy Sealed D = 5/16-24 F = 5/16-32 Z = Special	0 = Feed Thru Lead (Without Capacitor) 1 = Feed Thru Capacitor 2 = L-Section Filter 3 = PI Filter 4 = T-Section 5 = Double L-Section 6 = Five Element Cap Input 7 = Five Element IND Input 8 = Grounded Feed Thru	A = 100 VDC B = 200 VDC C = 50 VDC E = 400 VDC/230 VAC F = 500 VDC G = 1000 VDC H = 150 VDC J = 600 VDC K = 250 VDC L = 200 VDC/125 VAC (EXCEPT JD SERIES 300 VDC/125 VAC) M = 350 VDC N = 70 VDC X = 500 VDC Y = 300 VDC W = 400 VDC	A = .187 B = .312 C = Special	B = Class B S = Class S		G = Gold S = Silver

XXX	S07
Capacitance in Picofarads	All Other Circuit Types
Circuit	Current Rating
S = Standard L (Inductor on Thread End) R = Reverse L (Capacitor at Thread End) P = PI Circuit T = T Circuit	

Code	Current	Code	Current
01	.06 Amp	09	2
02	.1	10	3
03	.15	11	5
04	.25	12	10
05	.3	16	4
06	.45	17	6
07	.5	18	.75
08	1	19	1.5

Style	Capacitance Range					Current Rating	Circuit Available
	50VDC	100VDC	200VDC/115VAC	400VDC/230VAC	500VDC		
BL	5pF-1.5μF	5pF-.56μF	5pF-.39μF	5pF-.22μF	5pF-.12μF	15A	C, L
BK	5pF-1.5μF	5pF-.56μF	5pF-.39μF	5pF-.22μF	5pF-.12μF	15A	C, L
AK	5pF-1.8μF	5pF-.68μF	5pF-.39μF	5pF-.27μF	5pF-.15μF	15A	C, L
CK	5pF-1.5μF	5pF-.56μF	5pF-.39μF	5pF-.22μF	5pF-.12μF	15A	C, L
GK	5pF-1.5μF	5pF-.56μF	5pF-.39μF	5pF-.22μF	5pF-.12μF	Up to 15A	C, L, π, T
HK	5pF-1.8μF	5pF-.68μF	5pF-.39μF	5pF-.27μF	5pF-.15μF	Up to 15A	C, L, π, T
JD	5pF-1.8μF	5pF-.68μF	5pF-.39μF	5pF-.27μF	5pF-.15μF	Up to 15A	C, L, π, T



AVX filters has expanded its portfolio of custom and customized filters and filter plates/filter assemblies. These designs are suitable for use in low frequency to high frequency applications and can be configured in a variety of capacitive and inductive filter elements. Also available are high current assemblies and filter assemblies that are geared toward harsh environments such as high temperature, high shock and vibration. All of these solutions are ideal for industrial, avionic, downhole exploration and space level applications.

HOW TO ORDER

MFB	007	Q	-	001	T1	XX
Bracket Array	Number of Filters 001 - 999	Hermeticity Q = Hermetic (Glass Both Sides) H = Hermetic (Glass One Side) N = No Hermeticity Requirements		Customer Dash Number*	Customer ID Code	Customer Drawing

*If customer dash no. is 4 digits long, (e.g. - 0001) omit the first digit.