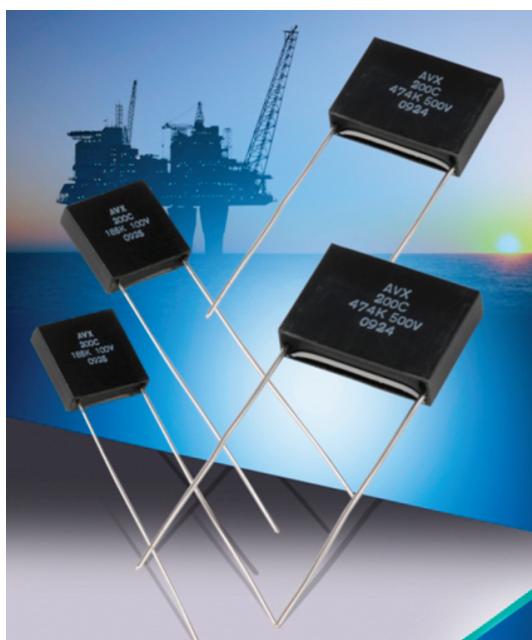


# SMPS Molded Radial MLC Capacitors

## SXP Style for High Temperature Applications up to 200°C



SXP-style, encapsulated radial leaded MLC capacitors are ideally suited for high temperature applications up to 200°C. This product is intended for downhole oil exploration, including logging while drilling, geophysical probes, as well as space, aerospace and hybrid automotive applications. This product supplements the SMX family of capacitors and offers mechanical protection to the ceramic element in extreme harsh environment. The high temperature solder utilized in the construction of SXP-style parts assures reliable operation in high temperature and rugged environments. The SXP-style capacitors are ideally suited for applications as DC filters in high power, high frequency motor drives, high pulsed-current circuitry, as well as standard electronic equipment designed for high temperature applications.

SXP-style, switch mode power supply capacitors are characterized with excellent performance. The main benefits of SXP product include:

- Low ESR, low ESL
- Low DC leakage
- Excellent high frequency performance

**Not RoHS Compliant**

### HOW TO ORDER

SXP	3	1	C	104	M	A	A
AVX Style	Size See Dimensions chart	Voltage Code	Temperature Coefficient	Capacitance Code	Capacitance Tolerance	Test Level	Leads
		50V = 5 100V = 1 200V = 2 500V = 7 1000V = A 1500V = S 2000V = G 3000V = H	C0G = A VHT = C	(2 significant digits + number of zeros) 100 pF = 101 22,000 pF = 223 1μF = 105	C0G: J = ±5% K = ±10% M = ±20%  X7R: J = ±5% K = ±10% M = ±20% Z = +80%, -20%	A = Standard	A = Standard Sn/Pb (min. 5% Pb)
							Tighter tolerances available upon request

### ELECTRICAL SPECIFICATIONS

#### Temperature Coefficient

C0G: A Temperature Coefficient 0 ±30 ppm/°C, -55° to +200°C  
VHT: C Temperature Coefficient ±15%, -55°C to +125°C  
+15% - 56%, -55°C to +200°C

#### Capacitance Test (MIL-STD-202 Method 305)

25°C, 1.0±0.2 Vrms (open circuit voltage) at 1KHz

#### Dissipation Factor 25°C

C0G: 0.15% Max @ 25°C, 1.0±0.2 Vrms (open circuit voltage) at 1KHz  
X7R/X9U: 2.5% Max @ 25°C, 1.0±0.2 Vrms (open circuit voltage) at 1KHz

#### Insulation Resistance 25°C (MIL-STD-202 Method 302)

100K MΩ or 1000 MΩ-μF, whichever is less.

#### Insulation Resistance 125°C (MIL-STD-202 Method 302)

10K MΩ or 100 MΩ-μF, whichever is less.

#### Insulation Resistance 200°C (MIL-STD-202 Method 302)

1k MΩ or 10 MΩ -μF, whichever is less.

#### Dielectric Withstanding Voltage 25°C (Flash Test)

250% rated voltage for 5 seconds with 50 mA max charging current. (150% for 500 VDC and 120% for 1000 VDC and higher voltage ratings)

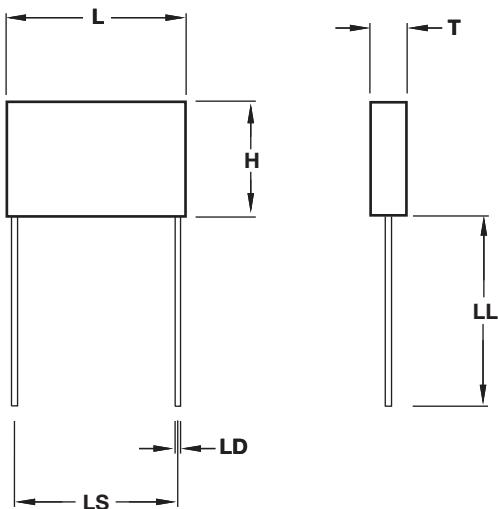


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### STYLE



### DIMENSIONS

millimeters (inches)

AVX Style	Length (L) ±0.25 (±0.010)	Height (H) ±0.25 (±0.010)	Thickness (T) ±0.25 (±0.010)	Lead Spacing ±0.76 (±0.030)	LD ±0.05 (±0.002)
<b>SXP1</b>	8.9 (0.350)	8.9 (0.350)	5.08 (0.200)	5.08 (0.200)	0.51 (0.020)
<b>SXP2</b>	11.4 (0.450)	11.4 (0.450)	5.08 (0.200)	5.08 (0.200)	0.51 (0.020)
<b>SXP3</b>	12.7 (0.500)	12.7 (0.500)	5.08 (0.200)	10.2 (0.400)	0.64 (0.025)
<b>SXP4</b>	22.4 (0.880)	16.3 (0.640)	5.84 (0.230)	19.8 (0.780)	0.81 (0.032)

### CAPACITANCE RANGE

#### C0G

Style	50V	100V	200V	500V	1000V	1500V	2000V	3000V
<b>SXP1</b> (MIN) (MAX)	1000pF .047µF	1000pF .027µF	1000pF 8200pF	100pF 4700pF	100pF 2200pF	100pF 1000pF	100pF 560pF	100pF 270pF
<b>SXP2</b> (MIN) (MAX)	.01µF .10µF	.01µF .056µF	.01µF .018µF	.01µF 8200pF	.01µF 4700pF	.01µF 1800pF	.01µF 1200pF	.01µF 560pF
<b>SXP3</b> (MIN) (MAX)	.01µF .15µF	.01µF .068µF	.01µF .022µF	.01µF .012µF	.01µF 6800pF	.01µF 2700pF	.01µF 1500pF	.01µF 1000pF
<b>SXP4</b> (MIN) (MAX)	.01µF .39µF	.01µF .22µF	.01µF .068µF	.01µF .033µF	.01µF .018µF	.01µF 8200pF	.01µF 4700pF	.01µF 2700pF

#### VHT

Style	50V	100V	200V	500V	1000V	1500V	2000V	3000V
<b>SXP1</b> (MIN) (MAX)	.1µF 1.5µF	.01µF 1.0µF	.01µF .33µF	.01µF .12µF	.01µF .056µF	.01µF .022µF	1000pF .012µF	1000pF 4700pF
<b>SXP2</b> (MIN) (MAX)	.1µF 2.7µF	.1µF 1.8µF	.01µF .68µF	.01µF .27µF	.01µF .10µF	.01µF .056µF	.01µF .022µF	1000pF 8200pF
<b>SXP3</b> (MIN) (MAX)	.01µF 3.9µF	.01µF 2.7µF	.01µF 1.0µF	.01µF .33µF	.01µF .15µF	.01µF .082µF	.01µF .033µF	.01µF .015µF
<b>SXP4</b> (MIN) (MAX)	1µF 12µF	.1µF 8.2µF	.1µF 2.7µF	.01µF 1.0µF	.01µF .47µF	.01µF .22µF	.01µF .10µF	.01µF .039µF

**Данный компонент на территории Российской Федерации****Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибуторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ Р В 0015-002 и ЭС РД 009

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