

Filtered Arrays

XD... Type



FEATURES

- To be used beneath a connector
- Provide an EMI filtered signal line between electronic modules
- Effective insertion loss from 1MHz up to ~ 1GHz
- Surface mount compatible

HOW TO ORDER

XD	06	Z	F	0153	K	--
AVX Style XD	Size 03 06 07	Class C = NP0 Z = X7R	Voltage F = 200 J = 500	Capacitance EIA code on 3 or 4 digits	Tolerance NP0 F = ±1% G = ±2% J = ±5% K = ±10% X7R J = ±5% K = ±10% M = ±20%	Packaging SUFFIX Burn-in 100% 168H = T5 Burn-in 100% 48H = T3 No burn-in = --

STYLE & DIMENSIONS

millimeters (inches)							
	TYPES	L	P	D	d	bm maxi	Thickness maxi
	XD07 (4 capacitors)	7.00 ± 0.15 (0.275 ± 0.006)	2.54 (0.100)	1.70 ± 0.15 (0.067 ± 0.006)	1.00 ± 0.10 (0.039 ± 0.0039)	0.3	2mm
	XD06 (4 capacitors)	6.00 ± 0.15 (0.236 ± 0.006)	2.54 (0.100)	1.70 ± 0.15 (0.067 ± 0.006)	1.00 ± 0.10 (0.039 ± 0.0039)	0.3	2mm
	XD03 (2 capacitors)	6.00 x 3.00 ± 0.15 (0.236 x 0.118 ± 0.006)	2.54 (0.100)	1.70 ± 0.15 (0.067 ± 0.006)	1.0 ± 0.10 (0.039 ± 0.0039)	0.3	1.5mm

Terminations: Silver – Palladium – Platinum, on 4 or only 2 sides of the array

CAPACITANCE vs VOLTAGE TABLE

Cap. Range (each cap.)	X7R		NP0	
	200VDC	500VDC	200VDC	500VDC
XD07...	33nF → 120nF	4.7nF → 18nF	470pF → 1500pF	220pF → 620pF
XD06...	15nF → 68nF	2.2nF → 10nF	220pF → 750pF	120pF → 330pF
XD03...	8.2nF → 39nF	1nF → 4.7nF	180pF → 390pF	82pF → 180pF

ELECTRICAL CHARACTERISTICS

Dielectric Class	X7R	NP0
Temperature Coefficient	$\Delta C/C \leq \pm 15\%$ (-55 +125°C)	0 ± 30ppm/°C
Climatic Category	55 / 125 / 56	55 / 125 / 56
Rated Voltage (U_R)	200 VDC	500VDC
Test Voltage (U_e)	2 x U_R	1.5 x U_R
Tangent of Loss Angle - DF	$\text{tg } \delta \leq 250(10^{-4})$	$\text{tg } \delta \leq 15(10^{-4})$
Insulation Resistance	$C \leq 10\text{nF} = R_i \geq 100 \text{ G}\Omega$ $C > 10\text{nF} = R_i \times C \geq 1000\text{s}$	$R_i \geq 100 \text{ G}\Omega$