

VISHAY / VITRAMON VJ HVArc Guard® Capacitors

VJ HVArc GUARD® SERIES

Features:

- Surface-mountable, multilayer ceramic capacitors, that protect against surface arc-over
- Higher capacitors and smaller case sizes that save board space, as compared to standard high voltage MLCCs
- Voltage breakdowns are twice that of some competitor products
- **Excellent reliability and high voltage performance**

Applications:

- DC-to-DC converters (Buck and Boost)
- Voltage multipliers for flyback converters
- Lighting ballast circuits
- Power supplies

Specifications:

- Operating Temperature: -55°C to +125°C
- Temperature Coefficient of Capacitance (TCC): X7R Style: $\pm 15\%$ from -55°C to +125°C, with 0VDC applied COG (NPO) Style: 0 ± 30 ppm/°C from -55°C to +125°C



LEAD-FREE



RoHS Compliant



DIMENSIONS: in. (mm)					
Part Ordering Number	Length	Width	Max. Thickness (T)	Termination Pad	
				Min.	Max.
VJ0805	0.079 ±0.008 (2.00 ±0.20)	0.049 ±0.008 (1.25 ±0.020)	0.057 (1.45)	0.010 (0.25)	0.028 (0.71)
VJ1206	0.126 ±0.008 (3.20 ±0.20)	0.063 ±0.008 (1.60 ±0.20)	0.067 (1.70)	0.010 (0.25)	0.028 (0.71)
VJ1210	0.126 ±0.008 (3.20 ±0.20)	0.098 ±0.008 (2.50 ±0.20)	0.067 (1.70)	0.010 (0.25)	0.028 (0.71)
VJ1808	0.177 ±0.010 (4.50 ±0.25)	0.08 ±0.010 (2.03 ±0.25)	0.067 (1.70)	0.010 (0.25)	0.030 (0.76)
VJ1812	0.177 ±0.010 (4.50 ±0.25)	0.126 ±0.008 (3.20 ±0.20)	0.086 (2.18)	0.010 (0.25)	0.030 (0.76)



Ceramic Caps, SMD

Vishay

MOUSER STOCK NO.	Vishay Part No.	Cap Value	Voltage	Temperature Coef.	Tol. (%)	Price Each			Full Reel Qty.	Price Per Piece
						1	100	500		
Style 0805										
77-VJ0805A221JXGAT5Z	VJ0805A221JXGAT5Z	220pF	1000	COG	5	.41	.312	.237	3000	.20
77-VJ0805A470JXRAT5Z	VJ0805A470JXRAT5Z	47pF	1500	COG	5	.40	.30	.237	3000	.20
Style 1206										
77-VJ1206Y101KXEAT5Z	VJ1206Y101KXEAT5Z	100pF	500	X7R	10	.46	.337	.262	2500	.224
77-VJ1206Y221KXEAT5Z	VJ1206Y221KXEAT5Z	220pF	500	X7R	10	.46	.337	.262	2500	.224
77-VJ1206Y471KXEAT5Z	VJ1206Y471KXEAT5Z	470pF	500	X7R	10	.46	.337	.262	2500	.224
77-VJ1206Y102KXEAT5Z	VJ1206Y102KXEAT5Z	1000pF	500	X7R	10	.41	.312	.237	2500	.20
77-VJ1206Y222KXEAT5Z	VJ1206Y222KXEAT5Z	2200pF	500	X7R	10	.96	.396	.36	2500	.192
77-VJ1206Y103KXEAT5Z	VJ1206Y103KXEAT5Z	.01uF	500	X7R	10	.48	.362	.274	2500	.237
77-VJ1206Y223KXEAT5Z	VJ1206Y223KXEAT5Z	.022uF	500	X7R	10	.52	.387	.30	2500	.262
77-VJ1206Y473KXEAT5Z	VJ1206Y473KXEAT5Z	.047uF	500	X7R	10	.63	.474	.362	2500	.312
77-VJ1206Y101KXGAT5Z	VJ1206Y101KXGAT5Z	100pF	1000	X7R	10	1.05	.558	.521	2500	.35
77-VJ1206Y221KXGAT5Z	VJ1206Y221KXGAT5Z	220pF	1000	X7R	10	1.05	.558	.521	2500	.35
77-VJ1206Y102KXGAT5Z	VJ1206Y102KXGAT5Z	1000pF	1000	X7R	10	1.02	.418	.38	2500	.203
77-VJ1206Y472KXGAT5Z	VJ1206Y472KXGAT5Z	4700pF	1000	X7R	10	.51	.374	.287	2500	.249
77-VJ1206Y223KXGAT5Z	VJ1206Y223KXGAT5Z	.022uF	1000	X7R	10	.78	.587	.45	2500	.387
77-VJ1206Y103KXGAT5Z	VJ1206Y103KXGAT5Z	.01uF	1000	X7R	10	.72	.549	.424	3000	.362
77-VJ1206A102JXRAT5Z	VJ1206A102JXRAT5Z	1000pF	1500	COG	5	.66	.499	.387	2500	.324
Style 1210										
77-VJ1210Y101KXEAT5Z	VJ1210Y101KXEAT5Z	100pF	500	X7R	10	.58	.437	.337	2500	.287
77-VJ1210Y221KXEAT5Z	VJ1210Y221KXEAT5Z	220pF	500	X7R	10	.61	.462	.362	2500	.299
77-VJ1210Y471KXEAT5Z	VJ1210Y471KXEAT5Z	470pF	500	X7R	10	.65	.487	.375	2500	.325
77-VJ1210Y222KXEAT5Z	VJ1210Y222KXEAT5Z	2200pF	500	X7R	10	.85	.637	.487	2500	.412
77-VJ1210Y223KXEAT5Z	VJ1210Y223KXEAT5Z	.022uF	500	X7R	10	1.19	.633	.591	2500	.398
77-VJ1210A220JXGAT5Z	VJ1210A220JXGAT5Z	22pF	1000	COG	5	1.37	.794	.739	2500	.558
77-VJ1210A470JXGAT5Z	VJ1210A470JXGAT5Z	47pF	1000	COG	5	1.37	.794	.739	2500	.558
77-VJ1210Y471KXGAT5Z	VJ1210Y471KXGAT5Z	470pF	1000	X7R	10	1.09	.583	.544	2500	.366
77-VJ1210Y102KXGAT5Z	VJ1210Y102KXGAT5Z	1000pF	1000	X7R	10	.71	.537	.412	2500	.35
77-VJ1210Y222KXGAT5Z	VJ1210Y222KXGAT5Z	2200pF	1000	X7R	10	1.36	.725	.677	2500	.511
77-VJ1210Y472KXGAT5Z	VJ1210Y472KXGAT5Z	4700pF	1000	X7R	10	1.36	.725	.677	2500	.511
77-VJ1210Y103KXGAT5Z	VJ1210Y103KXGAT5Z	.01uF	1000	X7R	10	.88	.662	.512	2500	.437
77-VJ1210Y223KXGAT5Z	VJ1210Y223KXGAT5Z	.022uF	1000	X7R	10	1.17	.875	.675	2500	.575
77-VJ1210Y473KXGAT5Z	VJ1210Y473KXGAT5Z	.047uF	1000	X7R	10	2.46	1.42	1.32	2500	.78
77-VJ1210A471JXRAT5Z	VJ1210A471JXRAT5Z	470pF	1500	COG	5	.78	.587	.45	2500	.387
77-VJ1210A102JXRAT5Z	VJ1210A102JXRAT5Z	1000pF	1500	COG	5	.78	.587	.45	2500	.387
Style 1808										
77-VJ1808Y222KXPAT5Z	VJ1808Y222KXPAT5Z	2200pF	250	X7R	10	1.29	.974	.749	2500	.637
77-VJ1808Y101KXEAT5Z	VJ1808Y101KXEAT5Z	100pF	500	X7R	10	1.29	.974	.749	2500	.637
77-VJ1808Y102KXEAT5Z	VJ1808Y102KXEAT5Z	1000pF	500	X7R	10	1.76	1.02	.951	2500	.56
77-VJ1808Y223KXEAT5Z	VJ1808Y223KXEAT5Z	.022uF	500	X7R	10	1.15	.862	.662	2500	.562
Style 1812										
77-VJ1812Y101KXPAT5Z	VJ1812Y101KXPAT5Z	100pF	250	X7R	10	1.29	.974	.749	1000	.699
77-VJ1812Y153KXPAT5Z	VJ1812Y153KXPAT5Z	.015uF	250	X7R	10	1.15	.862	.662	1000	.625
77-VJ1812Y331KXEAT5Z	VJ1812Y331KXEAT5Z	330pF	500	X7R	10	1.29	.974	.749	1000	.699
77-VJ1812Y102KXEAT5Z	VJ1812Y102KXEAT5Z	1000pF	500	X7R	10	1.26	.724	.72	1000	.705
77-VJ1812Y152KXEAT5Z	VJ1812Y152KXEAT5Z	1500pF	500	X7R	10	1.29	.974	.749	1000	.699
77-VJ1812Y103KXEAT5Z	VJ1812Y103KXEAT5Z	.01uF	500	X7R	10	1.15	.862	.662	1000	.625
77-VJ1812Y104KXEAT5Z	VJ1812Y104KXEAT5Z	.1uF	500	X7R	10	1.56	1.16	.90	1000	.85