



V-Series Single Layer Capacitors

V80 New Extension Release

Class II dielectric material with X7R characteristics for DC blocking or RF bypass applications in a broad frequency range.

These high frequency, wire bondable single layer capacitors are perfect for GaN and GaAs amplifier applications where small size and microwave performance are key to a well-performing circuit.

Features

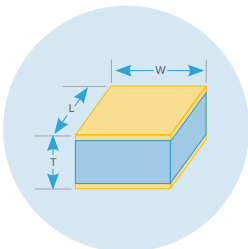
- Highest capacitance in the smallest footprint
- Introducing V80, 0408 case size, 100 nF
- X7R characteristics
- Wire-bondable
- RoHS compliant
- Excellent high frequency response

Applications

- DC blocking
- RF bypassing
- Filtering
- Tuning
- Coupling

Benefits

- High capacitance density
- Can be epoxy or AuSn solder mounted



CASE SIZE	MATERIAL	CAPACITANCE	TOLERANCE	VOLTAGE RATING	TERMINATION	TEST LEVEL
V30 (0303)	BZ	102 = 1 nF 222 = 2.2 nF 472 = 4.7 nF 682 = 6.8 nF 103 = 10 nF	M = $\pm 20\%$	5 = 50 V 1 = 100 V 6 = 200 V 8 = 150 V	S = Ni/Au	X = COMMERCIAL A = GROUP A B = GROUP B
V80 (0408)	BZ	104 = 100 nF	M = $\pm 20\%$	2 = 25 V 5 = 50 V	S = Ni/Au	X = COMMERCIAL A = GROUP A B = GROUP B

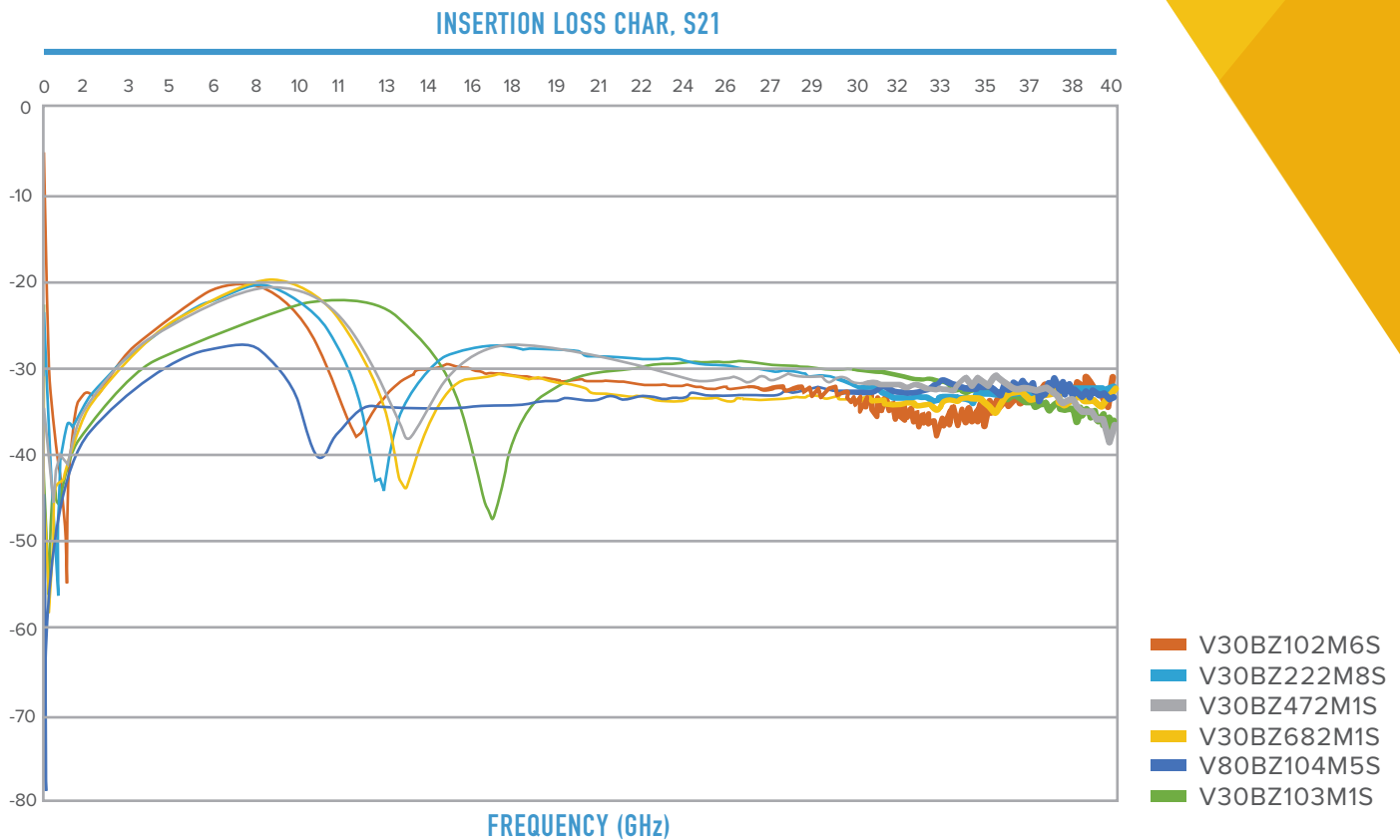
Metal Thickness: 100 μ m Min. of Au over 50 μ m Min. of Ni

PART	LENGTH, IN (mm)	WIDTH, IN (mm)	THICKNESS, IN (mm)	INSULATION RESISTANCE @ 25 °C	INSULATION RESISTANCE @ +125 °C	DISSIPATION FACTOR @ 1 MHZ
V30	0.03" $\pm$ 0.003" (0.762 mm $\pm$ 0.076 mm)	0.03" $\pm$ 0.003" (0.762 mm $\pm$ 0.076 mm)	0.022" $\pm$ 0.003" (0.559 mm $\pm$ 0.076 mm)	10^3	10^2	2.5%
V80	0.084" $\pm$ 0.004" (2.134 mm $\pm$ 0.102 mm)	0.042" $\pm$ 0.004" (1.067 mm $\pm$ 0.102 mm)	0.024" $\pm$ 0.003" (0.610 mm $\pm$ 0.076 mm)	10^3	10^2	2.5%

Packaging Options: Waffle Package.



RF PERFORMANCE



Attachment Method

- Compatible with epoxy and AuSn solder attachment.
- Bonding can be done with either needle or automatic dispensers.
- For epoxy curing, refer to epoxy manufacturer's preferred schedule, but it's typically in the range of 125 to 150 °C.