

**NEW!**

# Power Injection Chokes for PoC 1210POCA



- Small size to minimize the board area of overall system solutions, with a low profile of only 2.5 mm
- High impedance ( $\geq 1\text{k}\Omega$ ) maintained over a wide band frequency range to isolate AC signal from the DC power
- AEC-Q200 qualified

**Core material** Ferrite

**Environmental** RoHS compliant, halogen free

**Terminations** RoHS compliant matte tin over nickel over silver-platinum-glass frit.

**Weight** 115 – 125 mg

**Ambient temperature**  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  with  $I_{\text{rms}}$  current.

**Maximum part temperature**  $+140^{\circ}\text{C}$  (ambient + temp rise).

**Storage temperature** Component:  $-40^{\circ}\text{C}$  to  $+140^{\circ}\text{C}$ .  
Tape and reel packaging:  $-40^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$

**Resistance to soldering heat** Max three 40 second reflows at  $+260^{\circ}\text{C}$ , parts cooled to room temperature between cycles

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at  $<30^{\circ}\text{C}$  / 85% relative humidity)

**Packaging** 750/7" reel; 3000/13" reel; Plastic tape: 12 mm wide, 0.25 mm thick, 8 mm pocket spacing, 2.72 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	$L^2$ $\pm 20\%$ ( $\mu\text{H}$ )	DCR (Ohms) <sup>3</sup>		SRF typ <sup>4</sup> (MHz)	Isat (mA) <sup>5</sup>					I <sub>rms</sub> typ (mA)		
		typ	max		25°C	85°C	105°C	125°C	140°C	at 25°C <sup>6</sup>	at 85°C <sup>7</sup>	at 125°C <sup>8</sup>
1210POCA-222MR_	2.2	0.12	0.144	300	1800	1600	1400	1300	1100	1900	1800	800
1210POCA-682MR_	6.8	0.20	0.24	120	1100	900	850	740	640	1300	1200	700
1210POCA-103MR_	10	0.25	0.30	90	870	720	650	600	550	1200	1100	630
1210POCA-153MR_	15	0.40	0.48	80	750	650	570	500	450	960	870	500
1210POCA-223MR_	22	0.85	0.97	70	600	530	470	420	350	660	600	330

1. When ordering, please specify **packaging** code:

**1210POCA-223MRC**

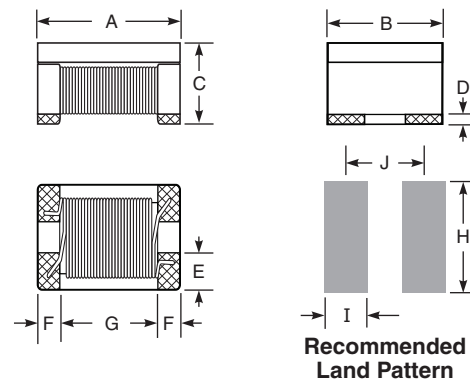
**Packaging:** **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (750 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

**D** = 13" machine-ready reel. EIA-481 embossed plastic tape (3000 parts per full reel). Factory order only, not stocked.

- Inductance tested at 100 kHz, 0.1 Vrms, 200 mA using HP4263 with SMD-B test fixture or equivalent
- DCR is measured on a Keithley 580 Micro-ohmmeter (or equivalent) with a Coilcraft CCF858 or CCF 987 test fixture.
- SRF measured using an Agilent/HP 5071C network analyzer and a Coilcraft SMD-D test fixture.
- DC current that causes 30% inductance drop from its initial value at 200 mA at specified temperature.
- Current that causes a 40°C rise at 25°C.
- Current that causes a 40°C rise at 85°C.
- Current that causes a 15°C rise at 125°C.
- Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

## Dimensions – 1210POCA



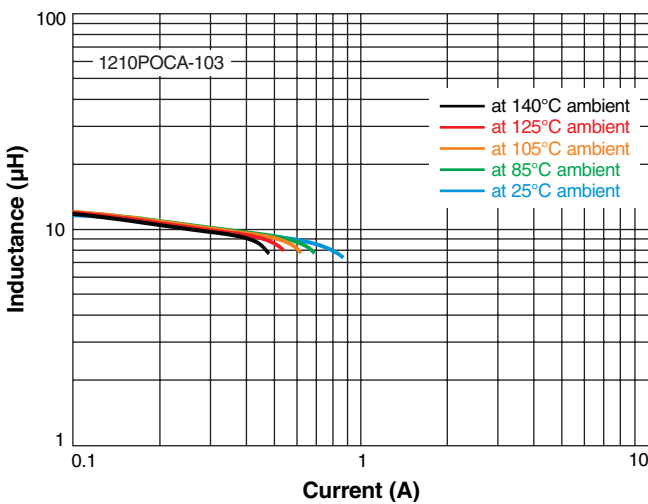
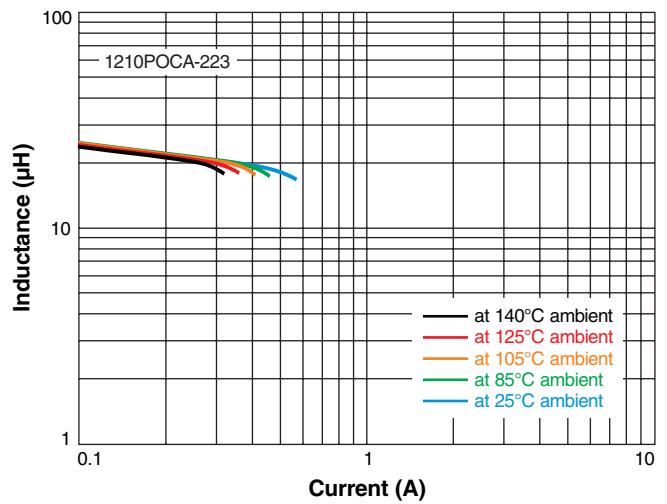
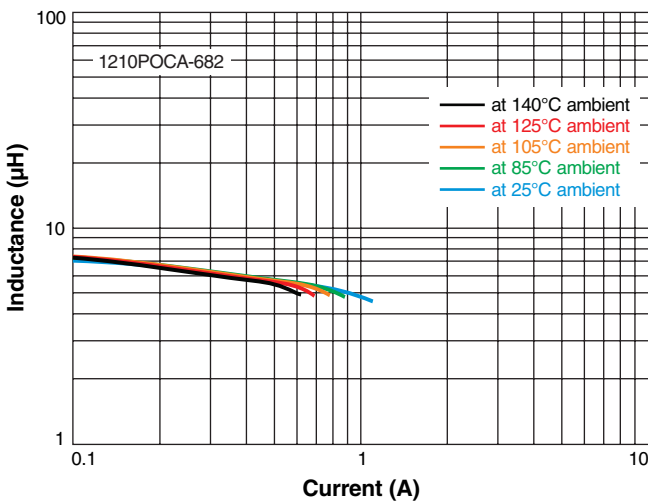
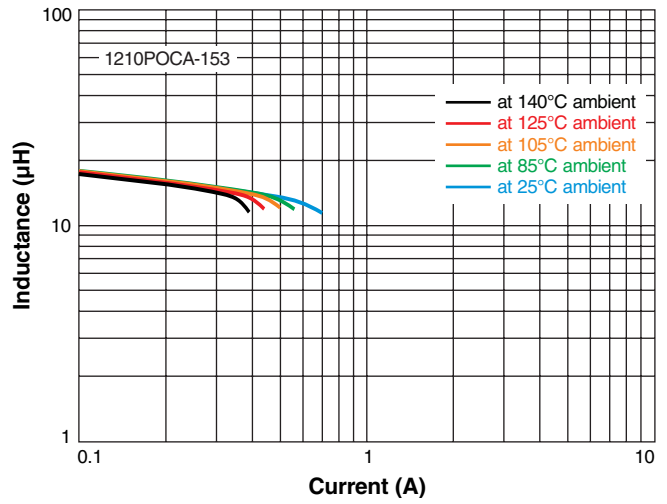
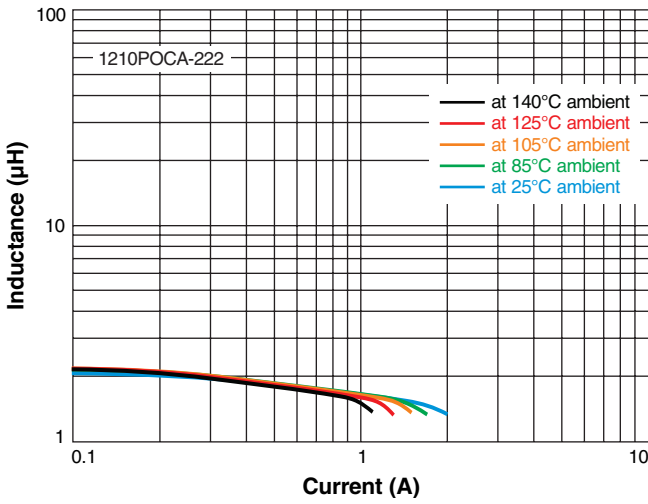
**Recommended Land Pattern**

A	B	C	D	E	F	G	H	I	J	
max	max	max								
0.13	0.105	0.098	0.004	0.037	0.020	0.080	0.104	0.026	0.100	in
3,30	2,67	2,50	0,10	0,94	0,51	2,03	2,65	0,65	2,54	mm



# 1210POCA Power Injection Chokes for PoC

## L vs Current



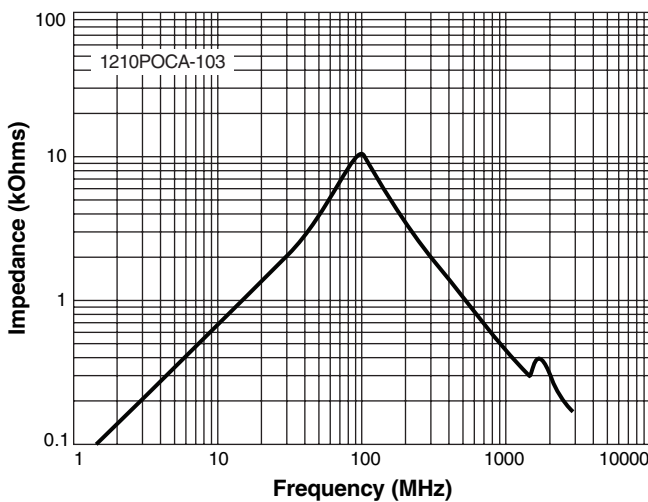
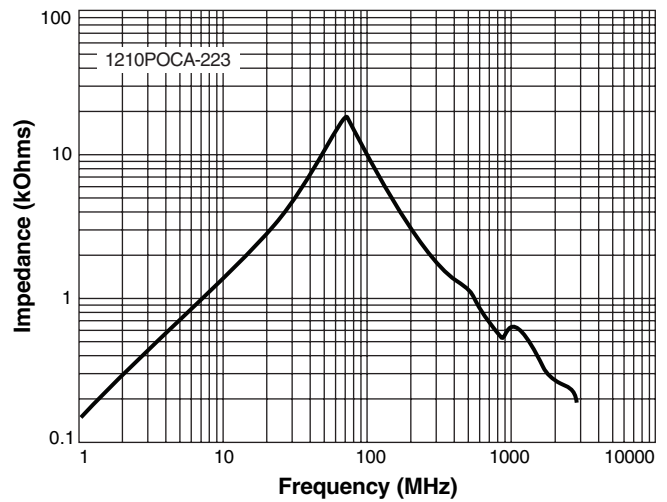
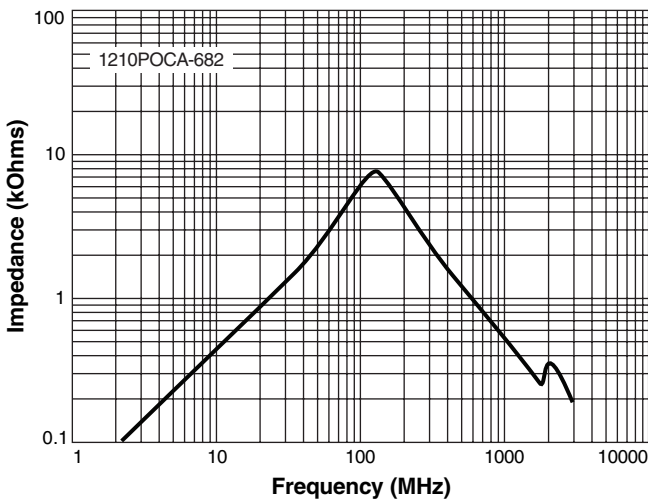
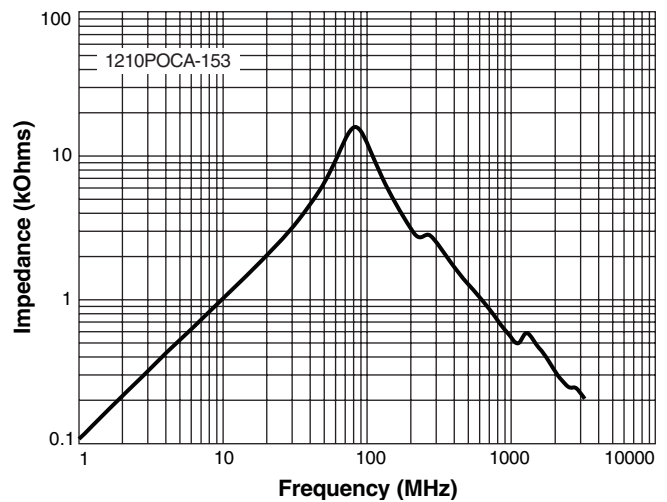
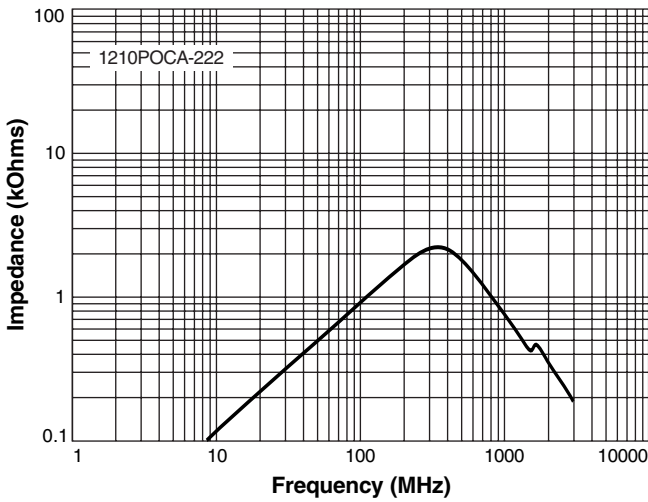
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## Impedance vs Frequency



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