

# SMT Common Mode Chokes

1.0A to 20.0A



- Wide variety of package sizes available
- 1Arms to 20Arms current rating
- Inductances from 61uH to 10mH
- Dielectric strength:** 1500Vrms (380Vrms continuous)

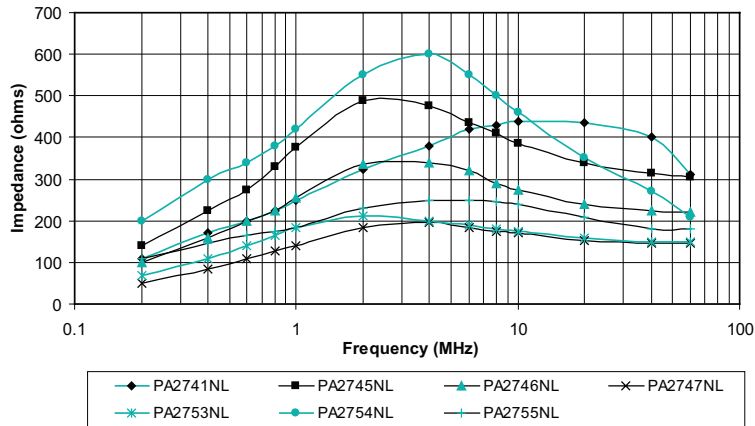
## Electrical Specifications at 25 deg C Temp Range -40 ° C to 125 ° C

Part Number	Inductance <sup>4</sup> per Winding (uH +30%/-35%)	Irated <sup>1</sup> (Arms or Adc)	DCR per Winding (mΩ Max)	Leakage Inductance (uH Min)	Package Name	Package Size L x W x H (mm Max)
PA2742NL	397	1	92	0.6	High Shasta	9.1 x 8.9 x 7.9
PA2741NL	94	1.1	30	0.3	Low Shasta	9.1 x 8.9 x 3.8
PA2752NL	10150	1.4	210	25	LCCI-50	19.6 x 17.0 x 9.9
PA2748NL	1125	1.8	55	3	Polecat	12.7 x 13.2 x 5.6
PA3927NL	800	3	27	1.5	Polecat	13x13x8.6
PA2743NL	383*	3.3	18	1	Polecat	13.0 x 13.0 x 5.6
PA2749NL	536	3.8	17.1	1.2	LCCI-37	16.4 x 14.2 x 8.9
PA2744NL	280	4	13.2	0.7	Polecat	13.0 x 13.0 x 5.6
PA2751NL	486	4.2	16	1	LCCI-44LP	18.2 x 15.0 x 7.6
PA2745NL	130*	5	6.75	0.4	Polecat	13.2 x 13.2 x 5.6
PA2746NL	96*	6	4.3	0.25	Polecat	13.2 x 13.2 x 5.6
PA2750NL	400	6	9.4	1.25	LCCI-44	18.2 x 15.0 x 10.0
PA2747NL	61*	7	2.9	0.15	Polecat	13.5 x 13.5 x 5.6
PA2756NL	484	8	7.7	1.5	LCCI-50	19.6 x 17.0 x 9.9
PA2757NL	1030	9	9.75	3	HCCI-80	31.0 x 25.4 x 12.7
PA2754NL	215	10	3.75	0.5	Makeni	21.1 x 19.1 x 11.2
PA2753NL	95	12.5	3	0.15	LCCI-50	19.6 x 17.0 x 9.9
PA2755NL	117	14	1.95	0.3	Makeni	21.1 x 19.1 x 11.2
PA2670NL	500	16	4.25	1.5	HCCI-80	31.0x25.4x12.7
PG1265NL	380	20	4.1	1.2	HCCI-80	31.0x25.4x12.7

**NOTE:**

1. The current rating (Irated) is based upon the temperature rise of the component and represents the rms current which will cause a typical temperature rise of **55C with 50LFM forced cooling**
2. The temperature of the component (ambient plus temperature rise) must be within the stated operating temperature range.
3. Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PA2741NL becomes PA2741NLT). Pulse complies to industry standard tape and reel specification EIA481.
4. Components identified by an asterisk have an inductance tolerance of +/- 35%. All other components are +30/-35%.
5. Parts marked with the AEC-Q200 symbol are AEC-Q200 qualified. Parts not identified as AEC-Q200 are still under test.

## Impedance Plots



## Impedance Plots



# SMT Common Mode Chokes

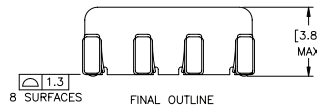
1.0A to 20.0A

## Mechanicals

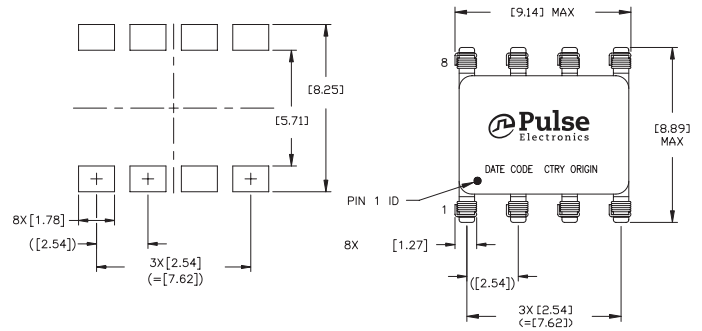
### Low Shasta - PA2741NL



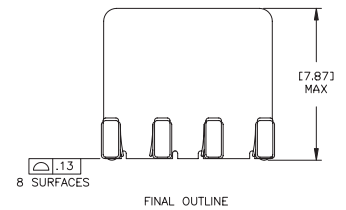
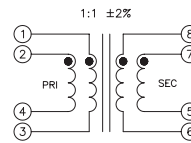
### Schematic



### High Shasta - PA2742NL

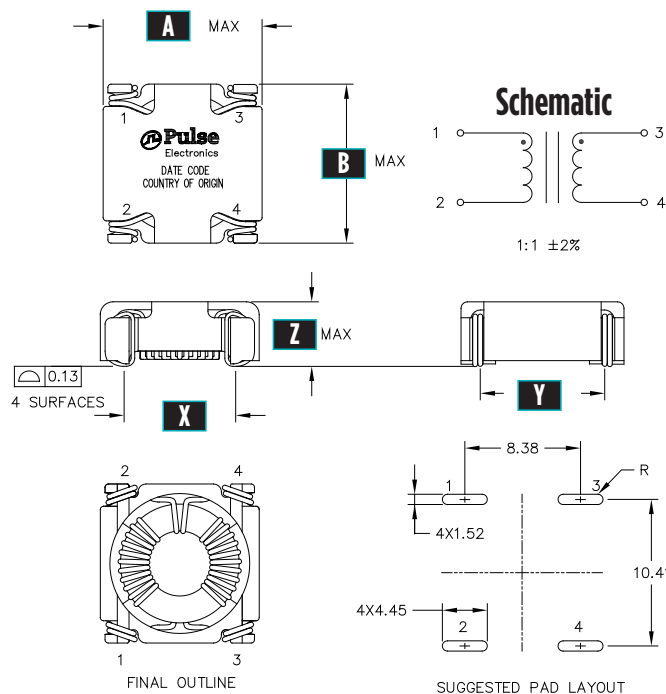


### Schematic



Please note that for PA2741NL and PA2742NL the part should be connected as follows:  
Customer to connect pins (1,2) and (4,3) together on board to form a single winding (1,2-4,3).  
Customer to connect pins (8,7) and (5,6) together on board to form a single winding (8,7-5,6).  
All ratings (leakage and DCR) are with respect to the above winding configuration.

### PoleCat - PA2743NL, PA2744NL, PA2745NL, PA2746NL, PA2747NL, PA2748NL and PA3927NL



### Polecat Dimensions

Part Number	A	B	X	Y	Z
PA2743NL	13.0	13.0	8.4	10.4	5.6
PA2744NL	13.0	13.0	8.4	10.4	5.6
PA2745NL	13.2	13.2	8.6	10.7	5.6
PA2746NL	13.2	13.2	8.6	10.7	5.6
PA2747NL	13.5	13.5	8.6	10.7	5.6
PA2748NL	12.7	13.2	8.4	10.4	5.6
PA3927NL	13.0	13.0	8.4	10.4	8.6

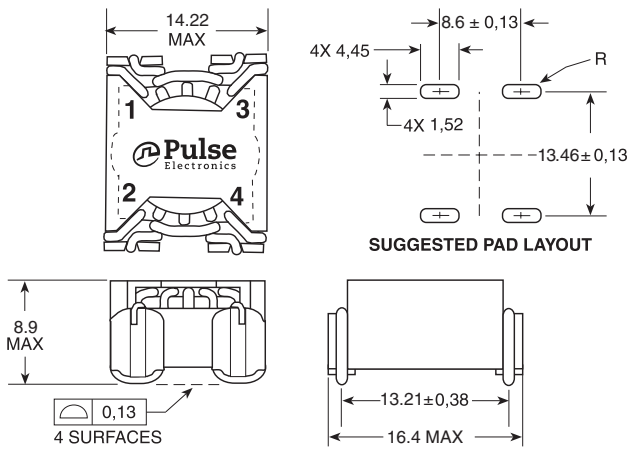
# SMT Common Mode Chokes

1.0A to 20.0A

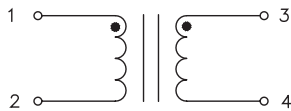


## Mechanicals

### LCCI-37 - PA2749NL

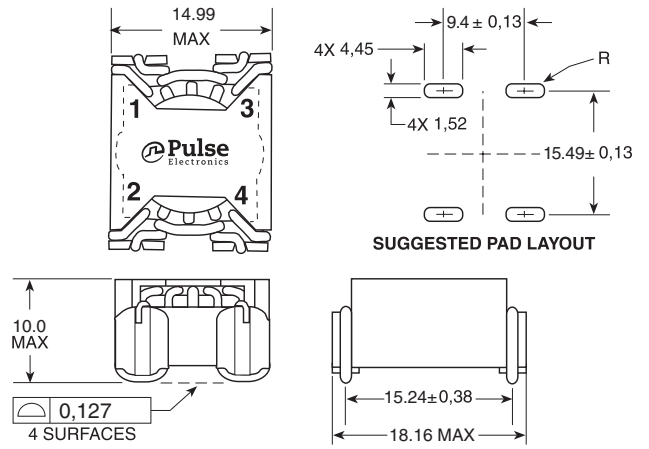


#### Schematic

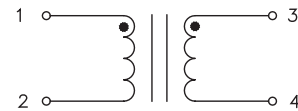


1:1 ±2%

### LCCI-44 - PA2750NL

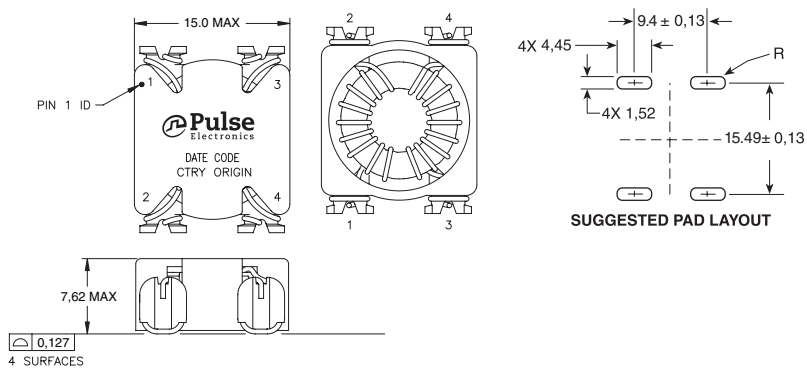


#### Schematic

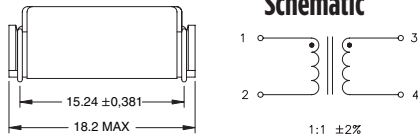


1:1 ±2%

### LCCI-44LP - PA2751NL

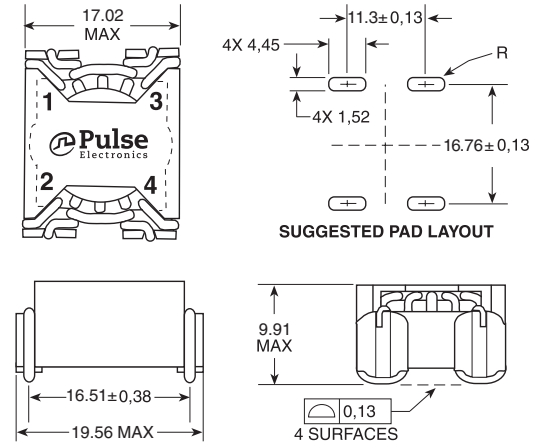


#### Schematic

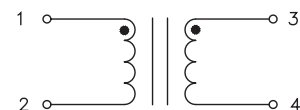


1:1 ±2%

### LCCI-50 - PA2752NL



#### Schematic



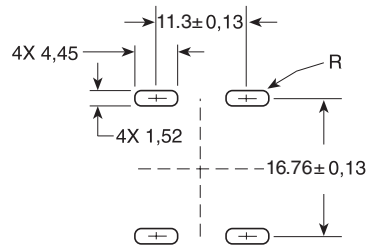
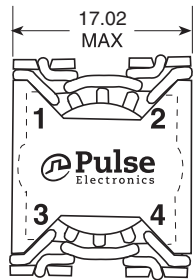
1:1 ±2%

# SMT Common Mode Chokes

1.0A to 20.0A

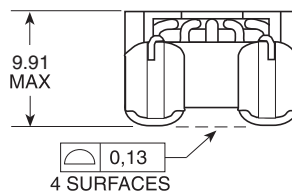
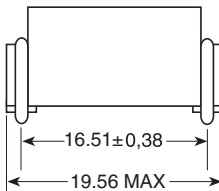
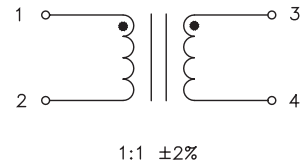
## Mechanicals

### LCCI-50 - PA2753NL and PA2756NL

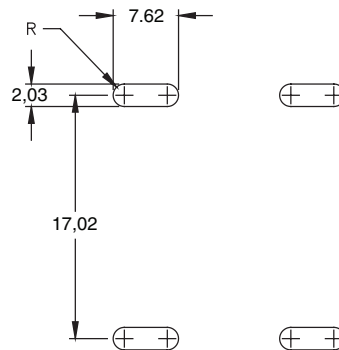
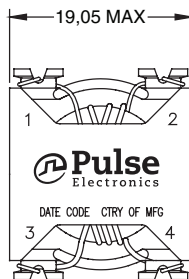


SUGGESTED PAD LAYOUT

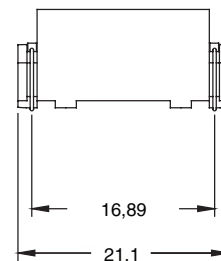
### Schematic



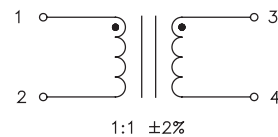
### Makeni - PA2754NL, PA2755NL



SUGGESTED PAD LAYOUT



### Schematic



0,127

4 SURFACES

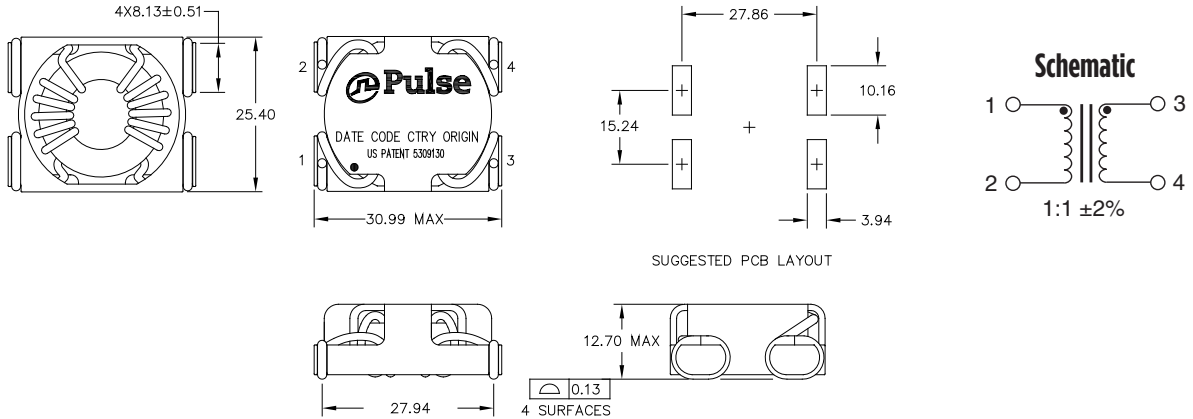
# SMT Common Mode Chokes

1.0A to 20.0A

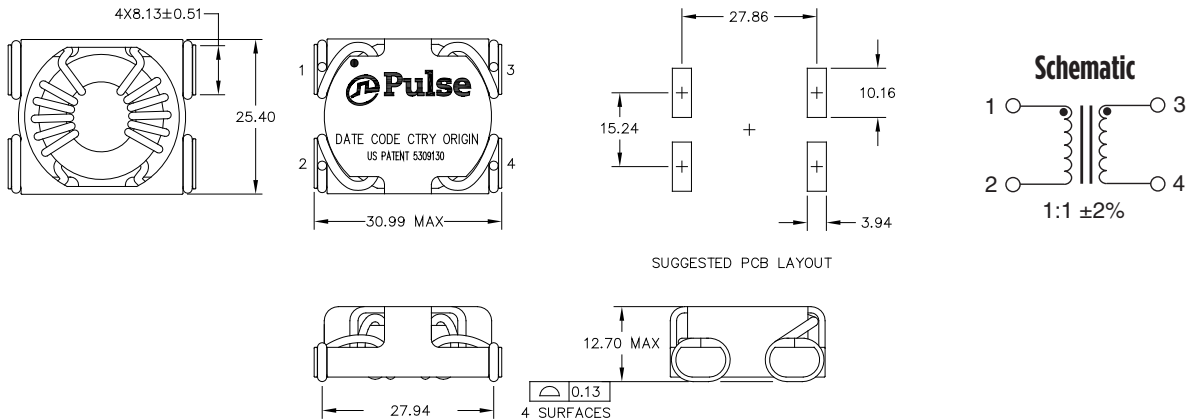


## Mechanical

### HCCI-80 - PA2757NL



### HCCI-80 - PA2670NL and PG1265NL



## For More Information

### Pulse Worldwide Headquarters

15255 Innovation Drive Ste 100  
San Diego, CA 92128  
U.S.A.

### Pulse Europe

Pulse Electronics GmbH  
Am Rottland 12  
58540 Meinerzhagen  
Germany

### Pulse China Headquarters

Pulse Electronics (ShenZhen) CO., LTD  
D708, Shenzhen Academy of  
Aerospace Technology,  
The 10th Keji South Road,  
Nanshan District, Shenzhen, P.R.  
China 518057

### Pulse North China

Room 2704/2705  
Super Ocean Finance Ctr.  
2067 Yan An Road West  
Shanghai 200336  
China

### Pulse South Asia

3 Fraser Street  
0428 DUO Tower  
Singapore 189352

### Pulse North Asia

1F, No.111  
Xiyuan Road  
Zhongli District  
Taoyuan City 32057  
Taiwan (R.O.C)

Tel: 858 674 8100  
Fax: 858 674 8262

Tel: 49 2354 777 100  
Fax: 49 2354 777 168

Tel: 86 755 33966678  
Fax: 86 755 33966700

Tel: 86 21 62787060  
Fax: 86 2162786973

Tel: 65 6287 8998  
Fax: 65 6280 0080

Tel: 886 3 4356768  
Fax: 886 3 4356820

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2019. Pulse Electronics, Inc. All rights reserved.