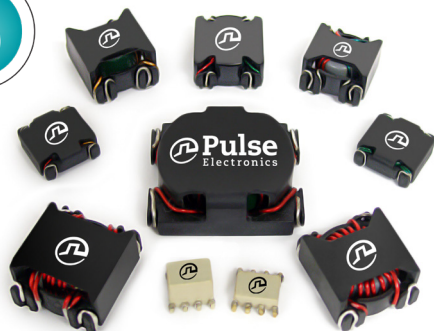


# SMT Common Mode Chokes

0.5A to 20Adc



- Wide variety of package sizes available
- Current Rating:** 0.5Arms to 20Arms
- Inductances Range:** 61uH to 13.2mH
- Dielectric strength:** 1500Vrms (380Vrms continuous)

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

| Part Number | Irated <sup>1</sup><br>(Arms or Adc) | Inductance <sup>4</sup><br>per Winding<br>(uH +/-35%) | DCR per Winding<br>(mΩ Max) | Leakage Inductance <sup>5</sup><br>(uH Min) | Typical SRF (MHz) | Typical Impedance at SRF (Ω) | Platform Name | Package Size (mm Max) | Weight (grms) | Quantity In Tube <sup>3</sup> | Quantity in T&R <sup>3</sup> |
|-------------|--------------------------------------|-------------------------------------------------------|-----------------------------|---------------------------------------------|-------------------|------------------------------|---------------|-----------------------|---------------|-------------------------------|------------------------------|
| PE-53914NL  | 0.5                                  | 13200*                                                | 850                         | -                                           | 0.19              | 6500                         | LCCI-37-2     | 16.4 x 14.2 x 8.9     | 2.3           | 30                            | 500                          |
| PA2742NL    | 1                                    | 397                                                   | 92                          | 0.6                                         | 6                 | 1500                         | High Shasta   | 9.1 x 8.9 x 7.9       | 0.6           | 50                            | 400                          |
| PE-53913NL  | 1                                    | 6000*                                                 | 450                         | -                                           | 0.22              | 6000                         | LCCI-37-2     | 16.4 x 14.2 x 8.9     | 2.3           | 30                            | 500                          |
| PA2741NL    | 1.1                                  | 94                                                    | 30                          | 0.3                                         | 15                | 450                          | Low Shasta    | 9.1 x 8.9 x 3.8       | 0.3           | 60                            | 125                          |
| P0354NL     | 1.22                                 | 1170                                                  | 200                         | 8.3*                                        | 3                 | 8200                         | Polecat       | 12.7 x 12.7 x 8.4     | 1.4           | 40                            | 500                          |
| PA2752NL    | 1.4                                  | 1010                                                  | 210                         | 25                                          | 4                 | 27500                        | LCCI-50-1     | 19.6 x 17.0 x 9.9     | 4.5           | 30                            | 200                          |
| PE-53911NL  | 1.5                                  | 900*                                                  | 60                          | -                                           | 3                 | 2800                         | LCCI-37-2     | 16.4 x 14.2 x 8.9     | 2.4           | 30                            | 500                          |
| P0473NL     | 1.63                                 | 880                                                   | 110                         | 6.0*                                        | 4                 | 6750                         | Polecat       | 12.7 x 12.7 x 8.4     | 1.4           | 40                            | 500                          |
| PA2748NL    | 1.8                                  | 1125                                                  | 55                          | 3                                           | 4                 | 3200                         | Polecat       | 12.7 x 13.2 x 5.6     | 1.6           | 40                            | 500                          |
| PE-53912NL  | 2.5                                  | 1800*                                                 | 80                          | -                                           | 2                 | 5000                         | LCCI-50-3     | 19.6 x 17.0 x 9.9     | 4.9           | 30                            | 200                          |
| P0351NL     | 2.8                                  | 1470                                                  | 80                          | 11.3*                                       | 2                 | 10700                        | LCCI-50-1     | 19.6 x 17.0 x 9.9     | 4.3           | 30                            | 200                          |
| PA3927NL    | 3                                    | 800                                                   | 27                          | 1.5                                         | 20                | 1300                         | Polecat       | 13.0 x 13.0 x 8.6     | 2.4           | 40                            | 500                          |
| P0420NL     | 3.3                                  | 1320                                                  | 60                          | 8.5*                                        | 2.5               | 9600                         | LCCI-50-1     | 19.6 x 17.0 x 9.9     | 4.5           | 30                            | 200                          |
| P0421NL     | 3.3                                  | 220                                                   | 60                          | 9.8*                                        | 18                | 10500                        | LCCI-50-1     | 19.6 x 17.0 x 9.9     | 4.7           | 30                            | 200                          |
| PA2743NL    | 3.3                                  | 383                                                   | 18                          | 1                                           | 2.5               | 1400                         | Polecat       | 13.0 x 13.0 x 5.6     | 1.7           | 40                            | 500                          |
| PE-53910NL  | 3.6                                  | 600*                                                  | 50                          | -                                           | 8                 | 1800                         | LCCI-50-3     | 19.6 x 17.0 x 9.9     | 5.0           | 30                            | 200                          |
| PA2749NL    | 3.8                                  | 536                                                   | 17.1                        | 1.2                                         | 2                 | 1400                         | LCCI-37-1     | 16.4 x 14.2 x 8.9     | 2.5           | 30                            | 500                          |
| PA2744NL    | 4                                    | 280                                                   | 13.2                        | 0.7                                         | 2                 | 1000                         | Polecat       | 13.0 x 13.0 x 5.6     | 1.6           | 40                            | 500                          |
| PA2751NL    | 4.2                                  | 486                                                   | 16                          | 1                                           | 2                 | 1800                         | LCCI-44LP     | 18.2 x 15.0 x 7.6     | 3             | 35                            | 300                          |
| P0422NL     | 4.7                                  | 770                                                   | 40                          | 5.2*                                        | 3                 | 6400                         | LCCI-50-1     | 19.6 x 17.0 x 9.9     | 4.7           | 30                            | 200                          |
| PA2745NL    | 5                                    | 130                                                   | 6.75                        | 0.4                                         | 3                 | 500                          | Polecat       | 13.2 x 13.2 x 5.6     | 1.6           | 40                            | 500                          |
| P0353NL     | 5.6                                  | 590                                                   | 21                          | 4.5*                                        | 4                 | 4900                         | LCCI-50-1     | 19.6 x 17.0 x 9.9     | 5             | 30                            | 200                          |
| PA2746NL    | 6                                    | 96                                                    | 4.3                         | 0.25                                        | 4                 | 350                          | Polecat       | 13.2 x 13.2 x 5.6     | 1.7           | 40                            | 500                          |
| PA2750NL    | 6                                    | 400                                                   | 9.4                         | 1.25                                        | 9                 | 900                          | LCCI-44       | 18.2 x 15.0 x 10.0    | 3.5           | 30                            | 200                          |
| PA2747NL    | 7                                    | 61                                                    | 2.9                         | 0.15                                        | 4                 | 200                          | Polecat       | 13.5 x 13.5 x 5.6     | 1.7           | 40                            | 500                          |
| P0527NL     | 7.2                                  | 530                                                   | 15                          | 5.1*                                        | 4                 | 3100                         | HCCI-68       | 28.2 x 25.4 x 10.0    | 7.3           | 20                            | 100                          |

# SMT Common Mode Chokes

0.5A to 20Adc

| Part Number | Irated <sup>1</sup><br>(Arms or Adc) | Inductance <sup>4</sup><br>per Winding<br>(uH +/-35%) | DCR per Winding<br>(mΩ Max) | Leakage Inductance <sup>5</sup><br>(uH Min)) | Typical SRF (MHz) | Typical Impedance at SRF (Ω) | Platform Name | Package Size (mm Max) | Weight (grms) | Quantity In Tube <sup>3</sup> | Quantity in T&R <sup>3</sup> |
|-------------|--------------------------------------|-------------------------------------------------------|-----------------------------|----------------------------------------------|-------------------|------------------------------|---------------|-----------------------|---------------|-------------------------------|------------------------------|
| PA2756NL    | 8                                    | 484                                                   | 7.7                         | 1.5                                          | 2.5               | 1700                         | LCCI-50-2     | 19.6 x 17.0 x 9.9     | 4.7           | 30                            | 200                          |
| PA2757NL    | 9                                    | 1030                                                  | 9.75                        | 3                                            | 2.5               | 1900                         | HCCI-80-1     | 31.0 x 25.4 x 12.7    | 14.6          | 20                            | 75                           |
| P0429NL     | 9.7                                  | 810                                                   | 14                          | 9.1*                                         | 3                 | 6400                         | HCCI-80-2     | 31.0 x 25.4 x 12.7    | 15.2          | 20                            | 75                           |
| PA2754NL    | 10                                   | 215                                                   | 3.75                        | 0.5                                          | 4                 | 600                          | Makeni        | 21.1 x 19.1 x 11.2    | 6.2           | 25                            | 150                          |
| P0469NL     | 11.6                                 | 630                                                   | 10                          | 7.4*                                         | 4                 | 4900                         | HCCI-80-2     | 31.0 x 25.4 x 12.7    | 15.2          | 20                            | 75                           |
| PA2753NL    | 12.5                                 | 95                                                    | 3                           | 0.15                                         | 2                 | 200                          | LCCI-50-2     | 19.6 x 17.0 x 9.9     | 4.2           | 30                            | 200                          |
| P0502NL     | 14                                   | 470                                                   | 8                           | 5.3*                                         | 3                 | 3750                         | HCCI-80-2     | 31.0 x 25.4 x 12.7    | 16.2          | 20                            | 75                           |
| PA2755NL    | 14                                   | 117                                                   | 1.95                        | 0.3                                          | 6                 | 250                          | Makeni        | 21.1 x 19.1 x 11.2    | 4.8           | 25                            | 150                          |
| PA2670NL    | 16                                   | 500                                                   | 4.25                        | 1.5                                          | 4                 | 1000                         | HCCI-80-2     | 31.0 x 25.4 x 12.7    | 17.8          | 20                            | 75                           |
| PG1265NL    | 20                                   | 380                                                   | 4.1                         | 1.2                                          | 1                 | 900                          | HCCI-80-2     | 31.0 x 25.4 x 12.7    | 14.5          | 20                            | 75                           |

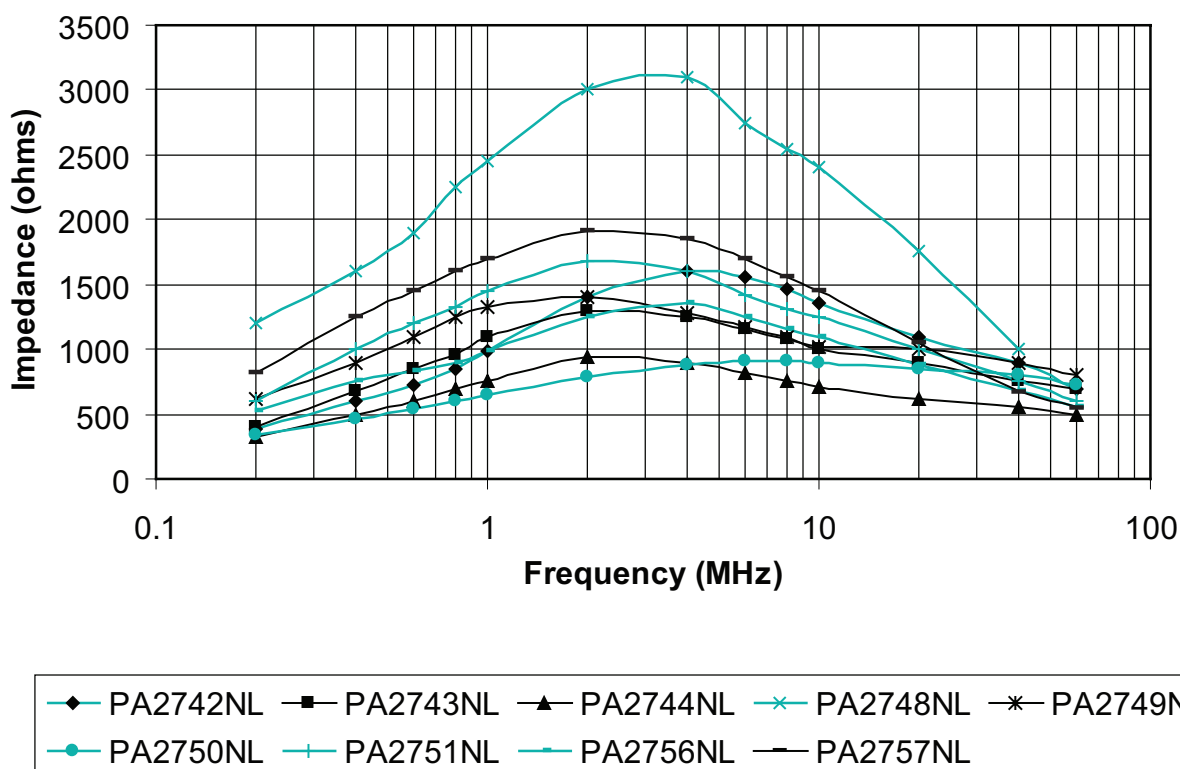
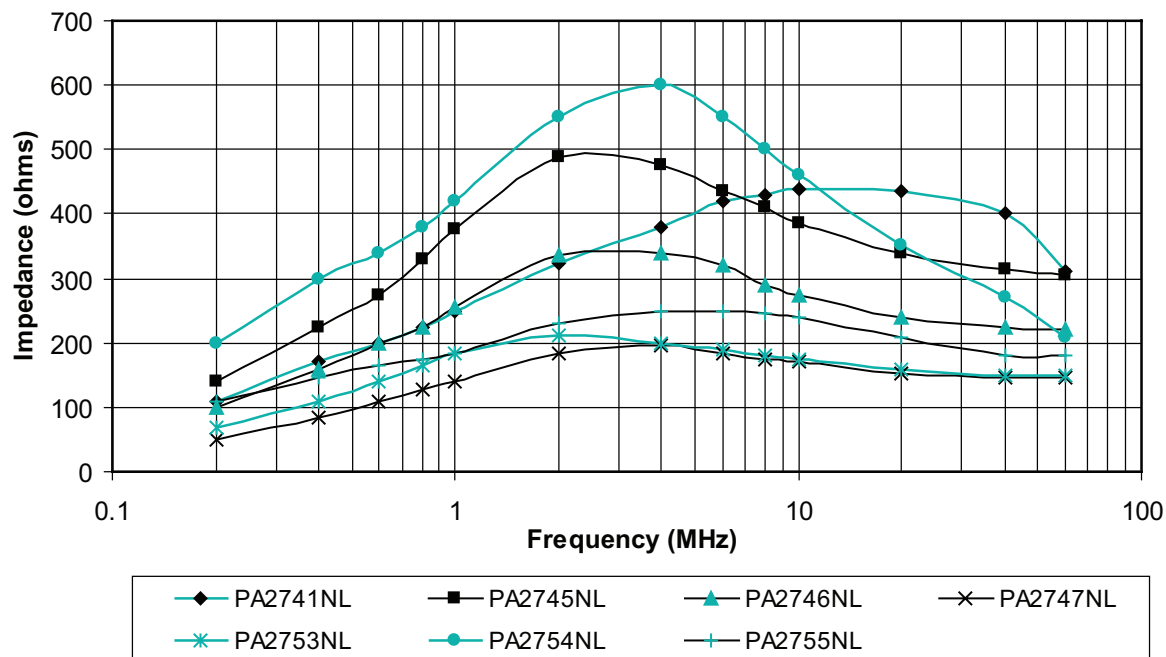
**NOTE:**

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. Inductance values shown are all nominal +/- 35% except those identified with an asterisk (\*) which indicates that the inductance is a minimum value.
5. Leakage inductance values as shown are the minimum value except those identified with an asterisk (\*) which indicates the value shown in a typical value.

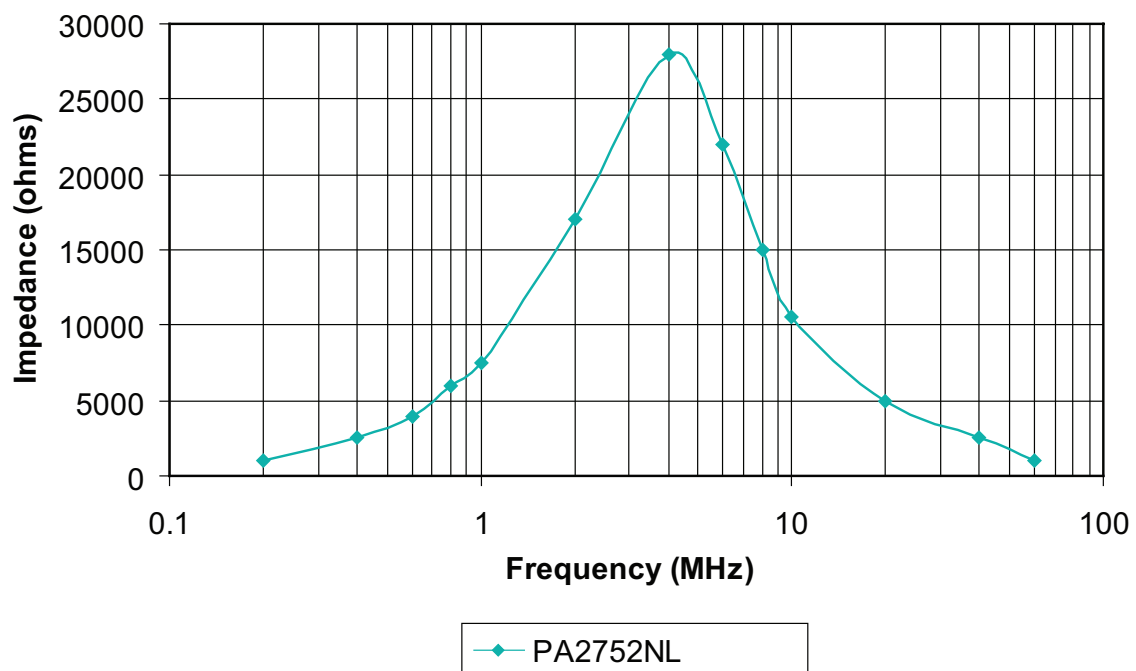
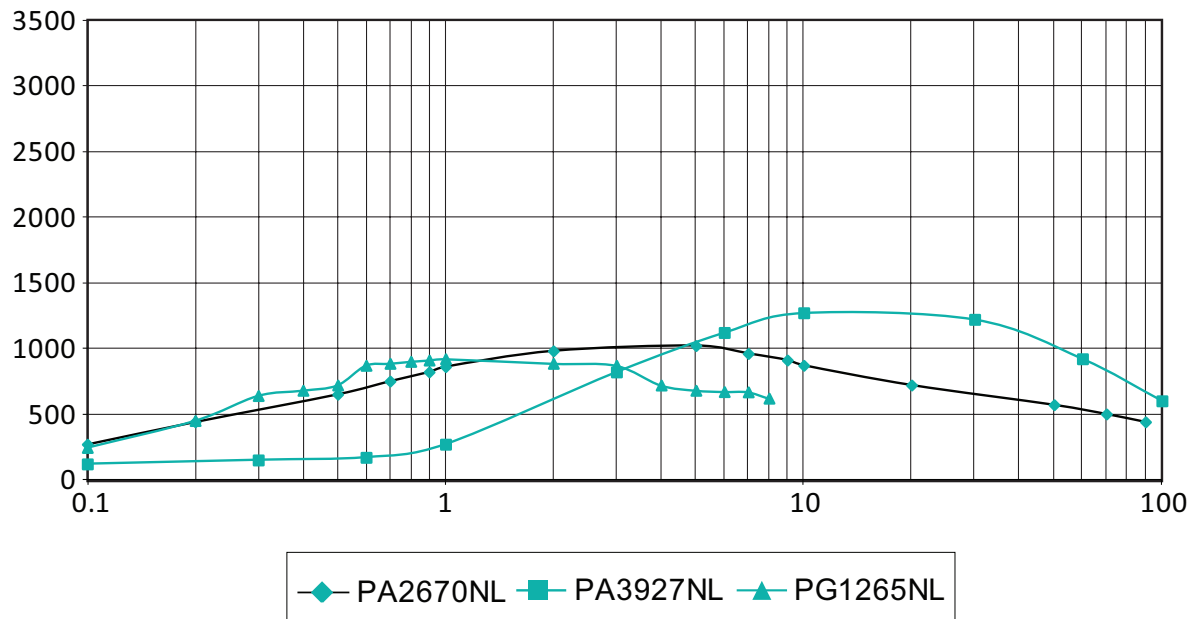
# SMT Common Mode Chokes

0.5A to 20Adc

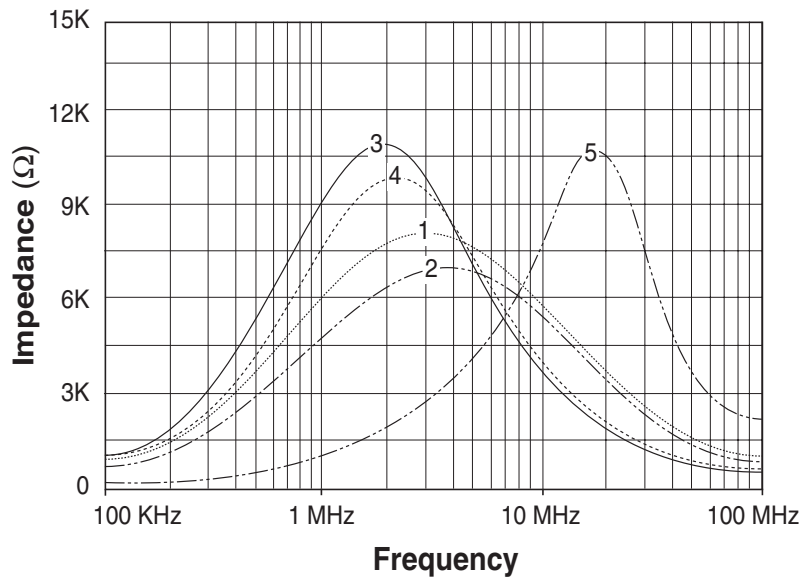
### Impedance Plots



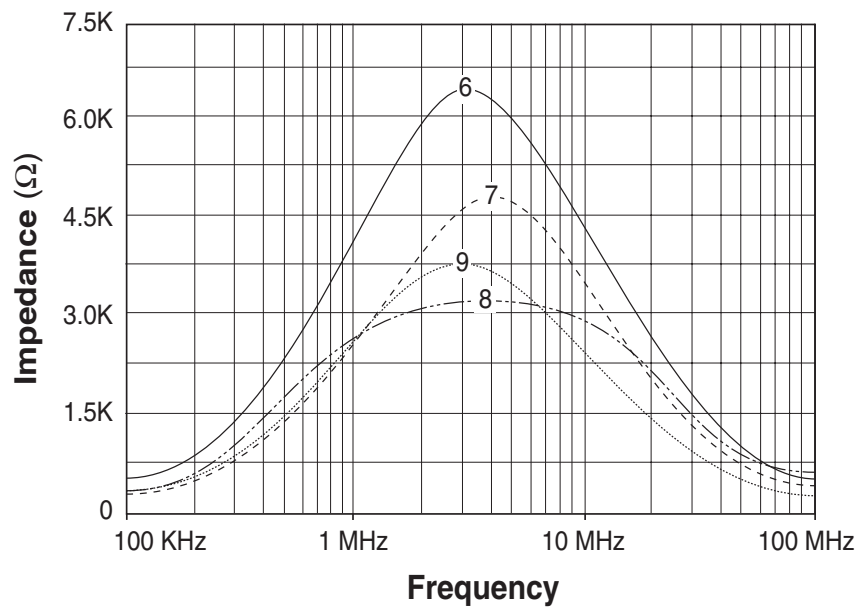
## Impedance Plots



## Impedance Plots

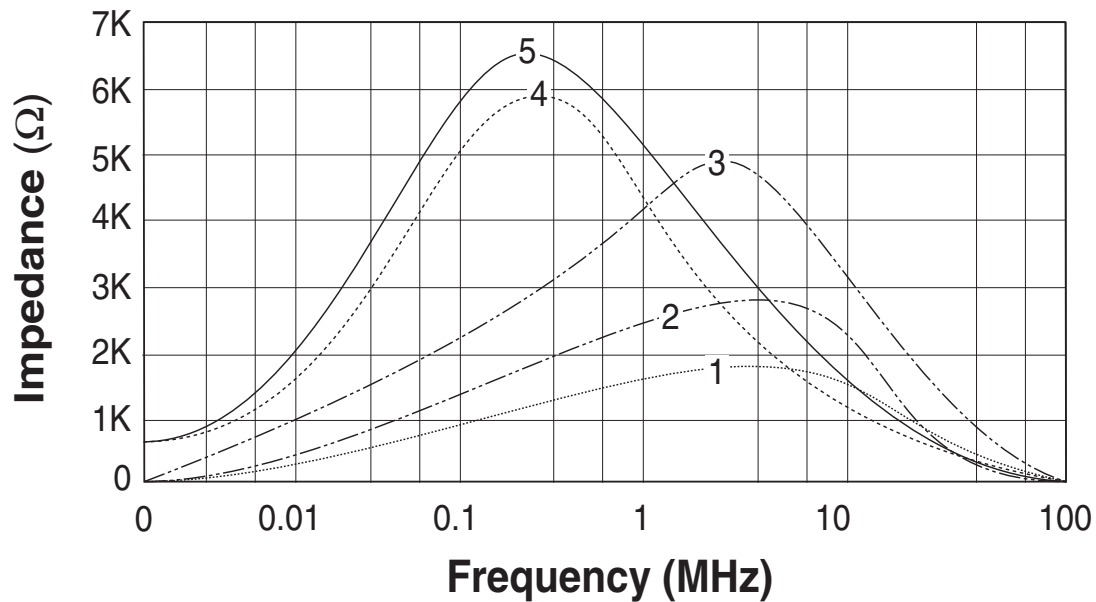


|             |             |             |
|-------------|-------------|-------------|
| 1 - PO354NL | 3 - PO351NL | 5 - PO421NL |
| 2 - PO473NL | 4 - PO420NL |             |



|                      |             |
|----------------------|-------------|
| 6 - PO422NL, PO429NL | 8 - PO527NL |
| 7 - PO353NL, PO469NL | 9 - PO502NL |

## Impedance Plots



1 - PE-53910NL  
2 - PE-53911NL

3 - PE-53912NL  
4 - PE-53913NL

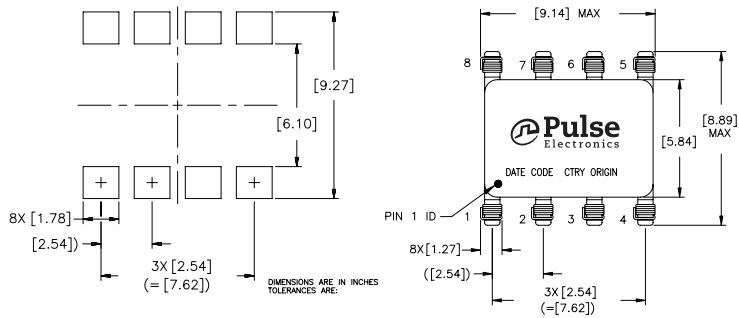
5 - PE-53914NL

# SMT Common Mode Chokes

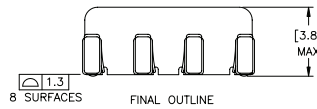
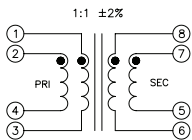
0.5A to 20Adc

## Mechanicals

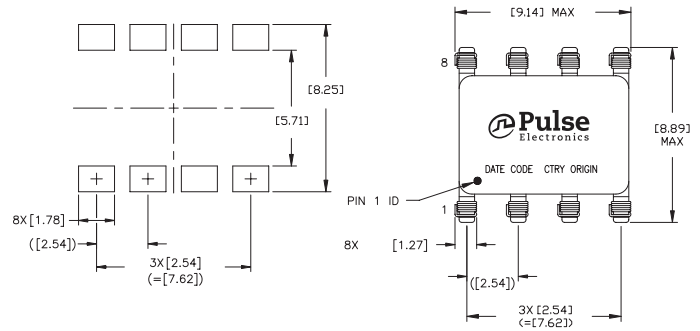
### Low Shasta - PA2741NL



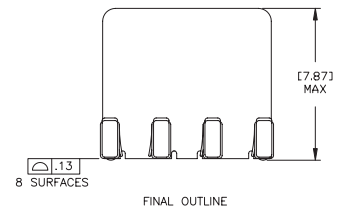
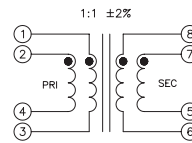
#### Schematic



### High Shasta - PA2742NL

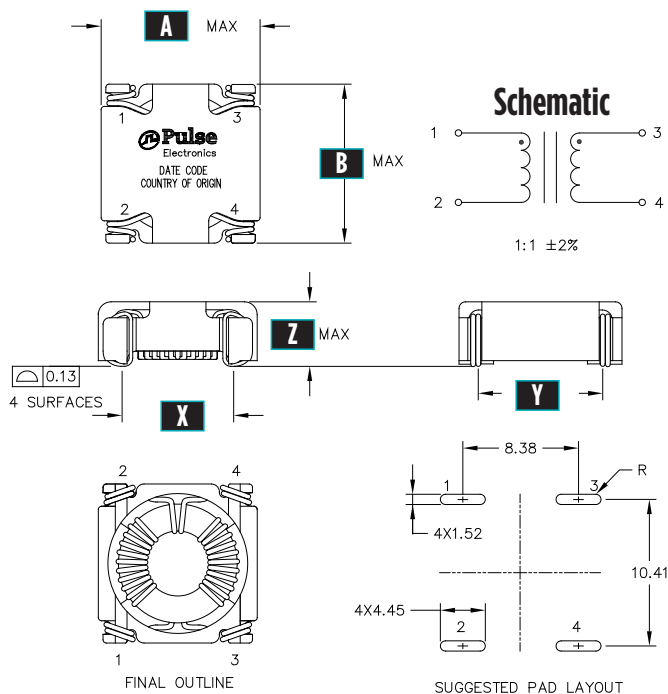


#### Schematic



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, PA3927NL, P0473NL, and P0354NL



#### Polecat Dimensions

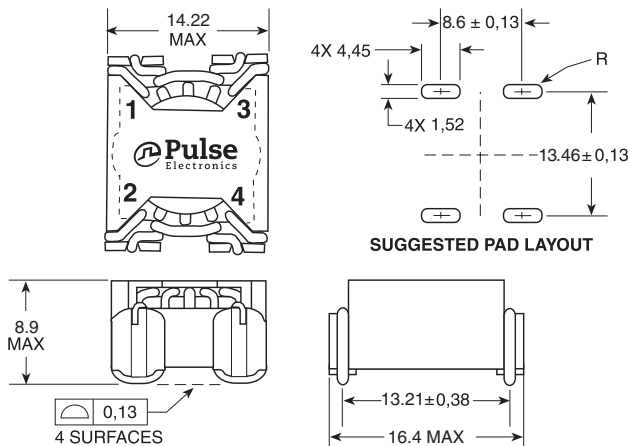
| Part Number | A    | B    | X   | Y    | Z   |
|-------------|------|------|-----|------|-----|
| PA2743NL    | 13.0 | 13.0 | 8.4 | 10.4 | 5.6 |
| PA2744NL    | 13.0 | 13.0 | 8.4 | 10.4 | 5.6 |
| PA2745NL    | 13.2 | 13.2 | 8.6 | 10.7 | 5.6 |
| PA2746NL    | 13.2 | 13.2 | 8.6 | 10.7 | 5.6 |
| PA2747NL    | 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 |
| PA473NL     | 12.7 | 12.7 | 8.4 | 10.4 | 5.5 |
| PA0354NL    | 12.7 | 12.7 | 8.4 | 10.4 | 5.5 |

# SMT Common Mode Chokes

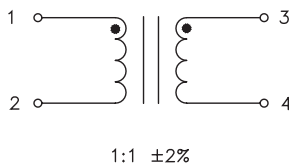
0.5A to 20Adc

## Mechanicals

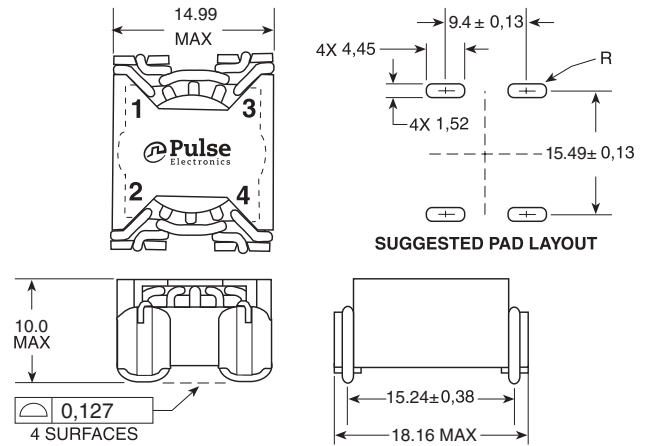
### LCCI-37-1 - PA2749NL



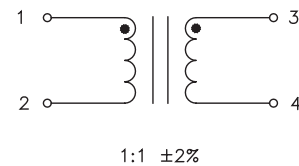
#### Schematic



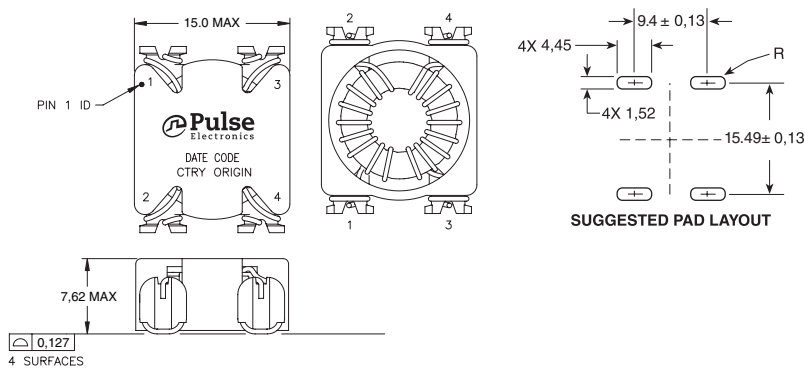
### LCCI-44 - PA2750NL



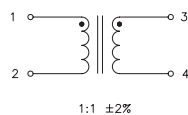
#### Schematic



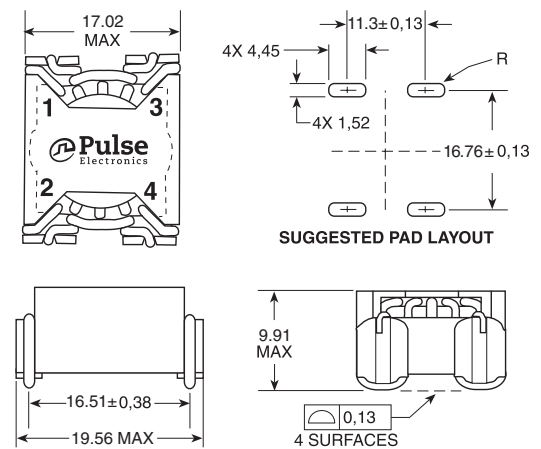
### LCCI-44LP - PA2751NL



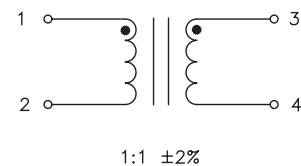
#### Schematic



### LCCI-50-1 - PA2752NL, P0353NL, P0422NL, P0421NL, P0420NL, P0351NL



#### Schematic



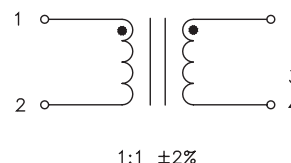
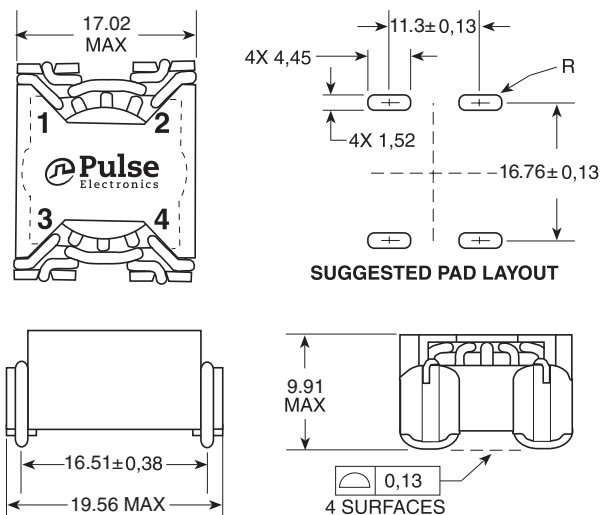
# SMT Common Mode Chokes

0.5A to 20Adc

## Mechanicals

## Schematics

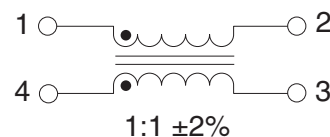
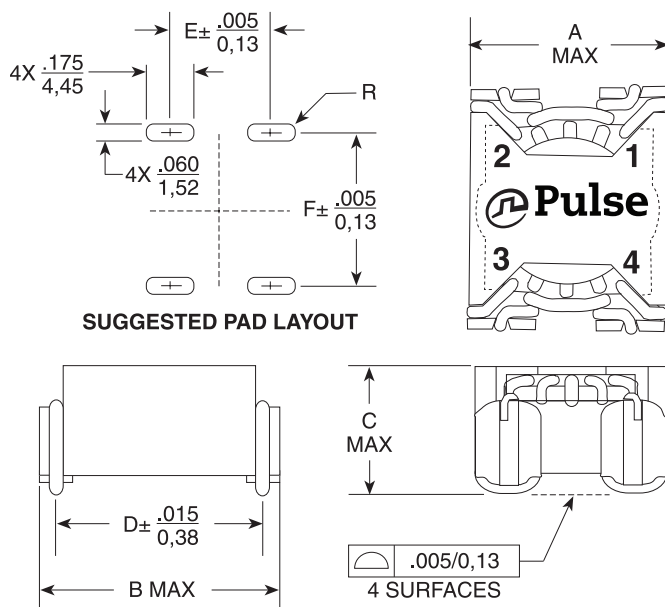
### LCCI-50-2 - PA2753NL and PA2756NL



## Mechanicals

## Schematics

### LCCI-37-2 & LCCI-50-3 - PE-5391xNL



| Size      | A          | B          | C         | D          | E          | F          |
|-----------|------------|------------|-----------|------------|------------|------------|
| LCCI-37-2 | .560/14,22 | .645/16,38 | .350/8,89 | .520/13,21 | .340/8,64  | .530/13,46 |
| LCCI-50-3 | .670/17,02 | .770/19,56 | .390/9,90 | .650/16,51 | .445/11,30 | .660/16,76 |

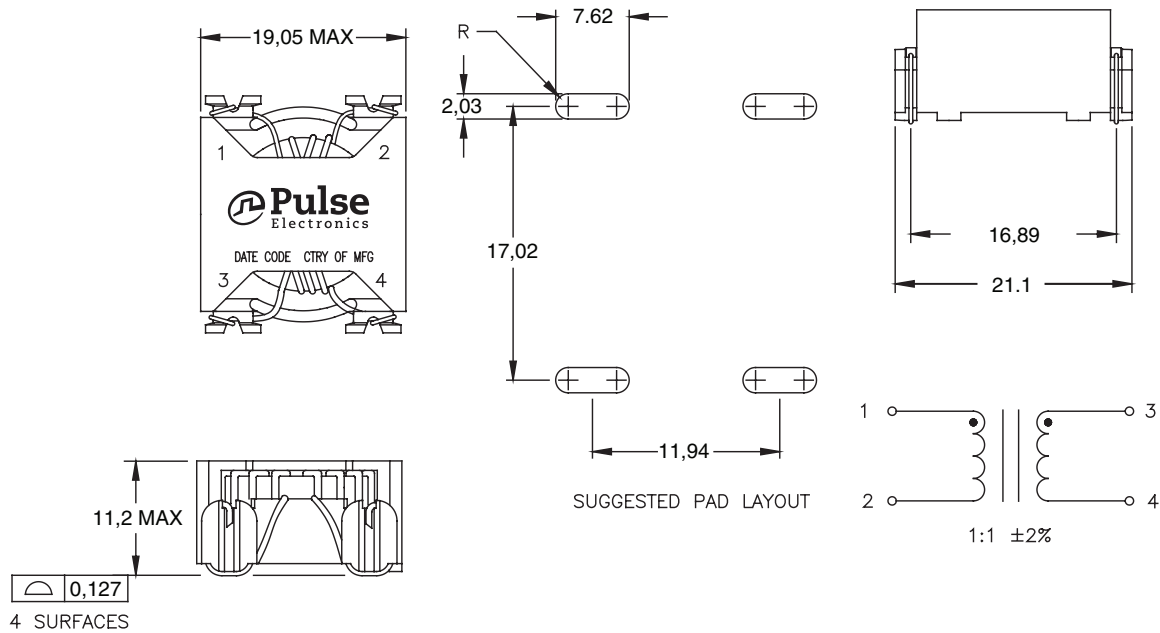
# SMT Common Mode Chokes

0.5A to 20Adc

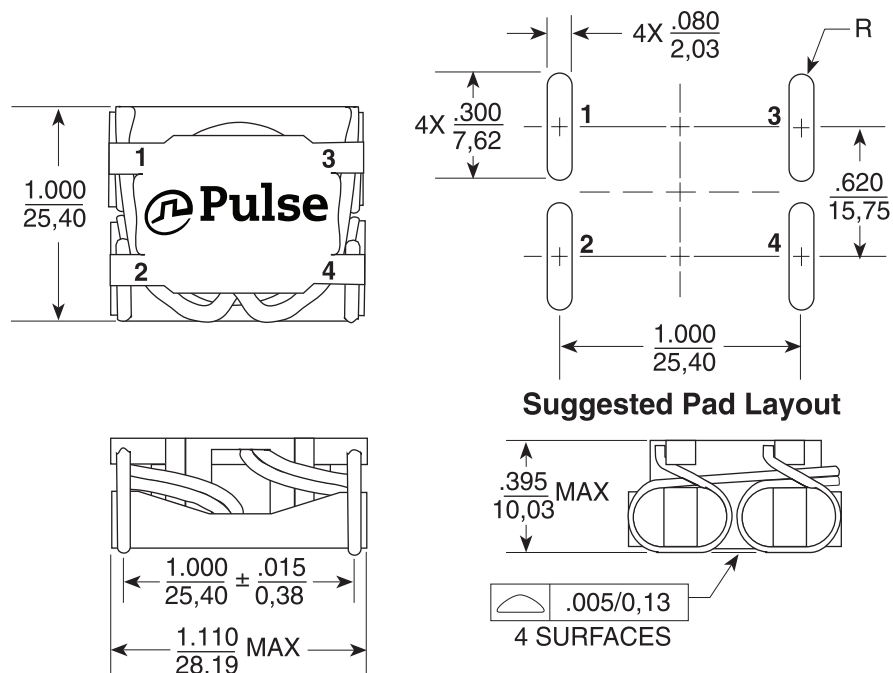
## Mechanicals

## Schematics

### Makeni - PA2754NL, PA2755NL



### HCCI-68 - P0527NL



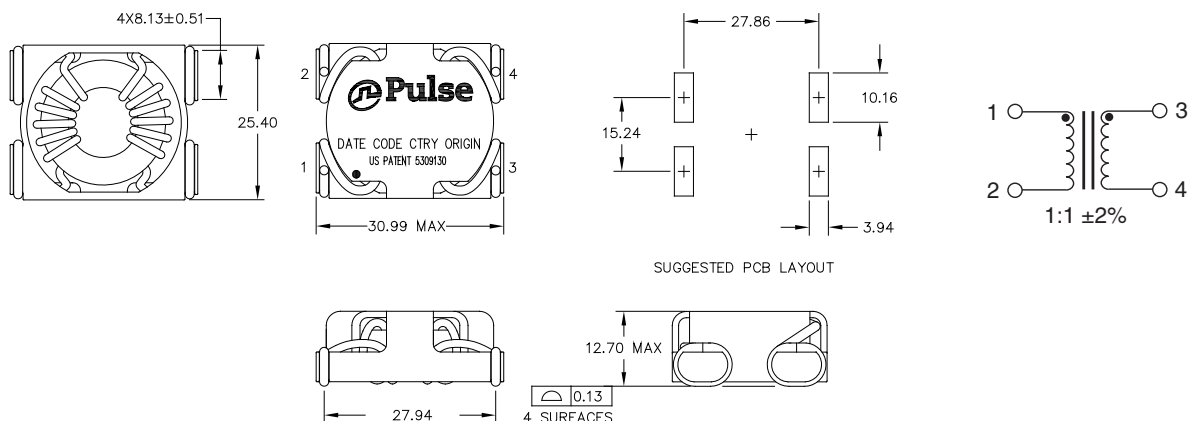
# SMT Common Mode Chokes

1.0A to 20.0A

## Mechanical

## Schematic

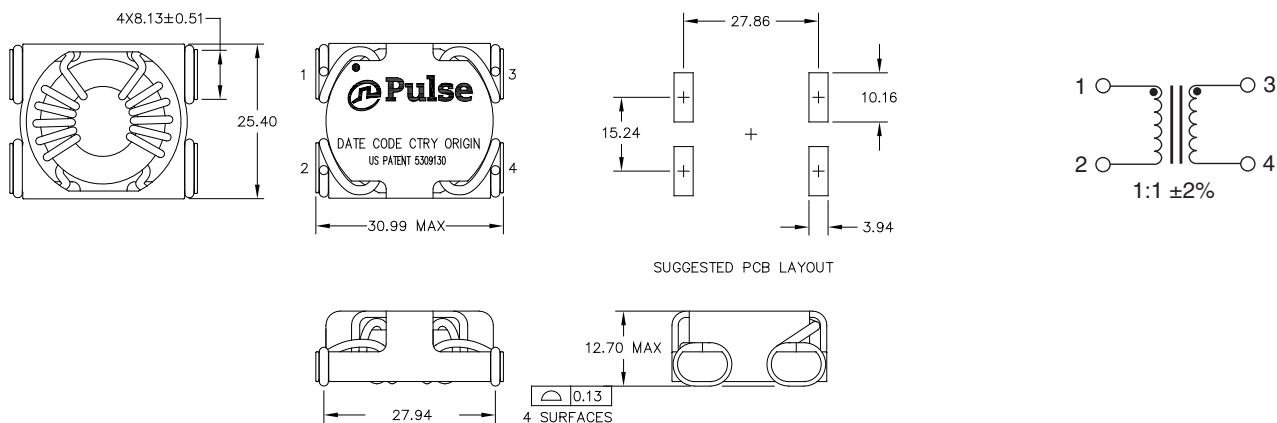
### HCCI-80-1 - PA2757NL



## Mechanical

## Schematic

### HCCI-80-2 - PA2670NL, PG1265NL, P0502NL, P0469NL and P0429NL



## For More Information:

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