

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)

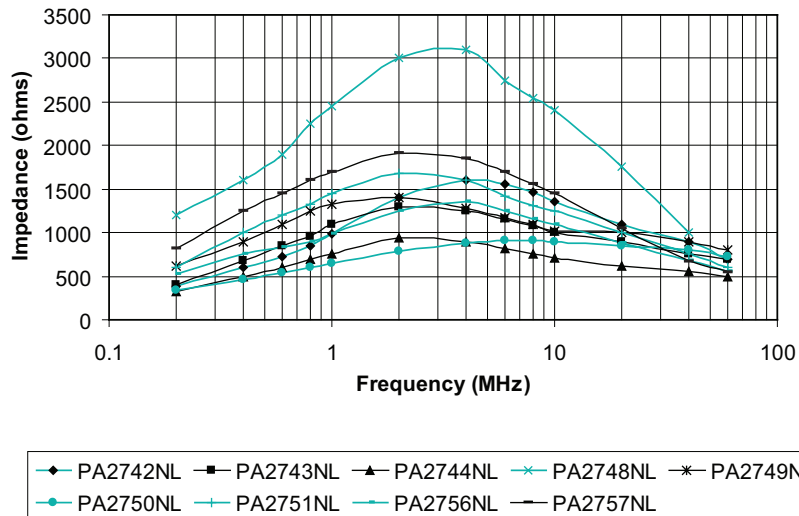
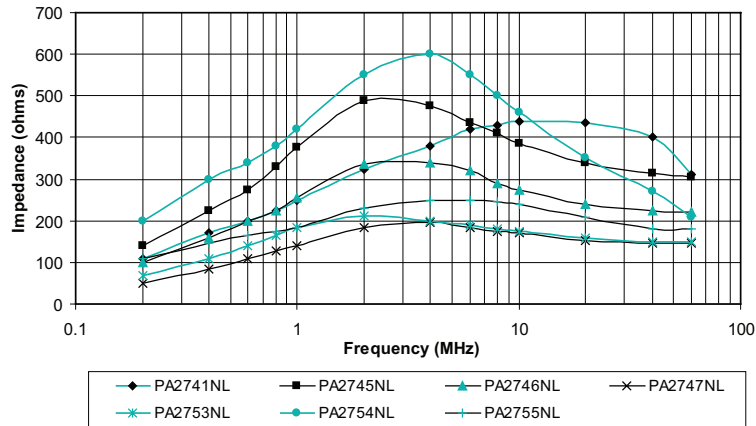
Electrical Specifications at 25 deg C Temp Range -40 ° C to 125 ° C

| Part Number | Inductance ⁴ per Winding (uH +30%/-35%) | Irated ¹ (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 |

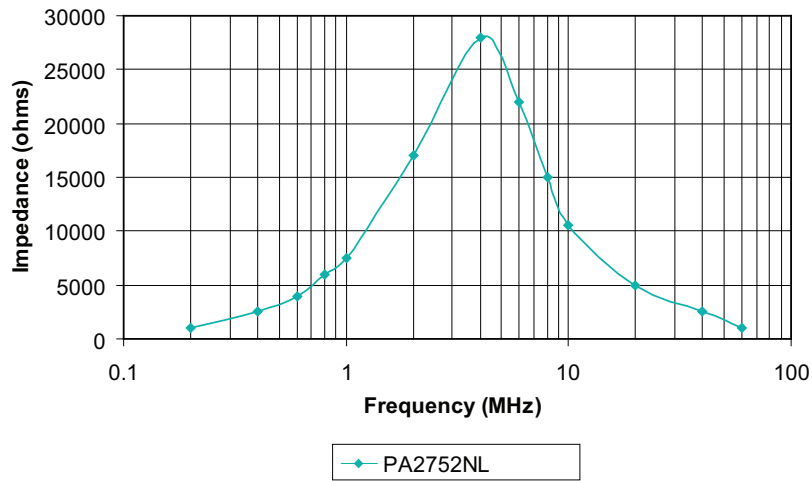
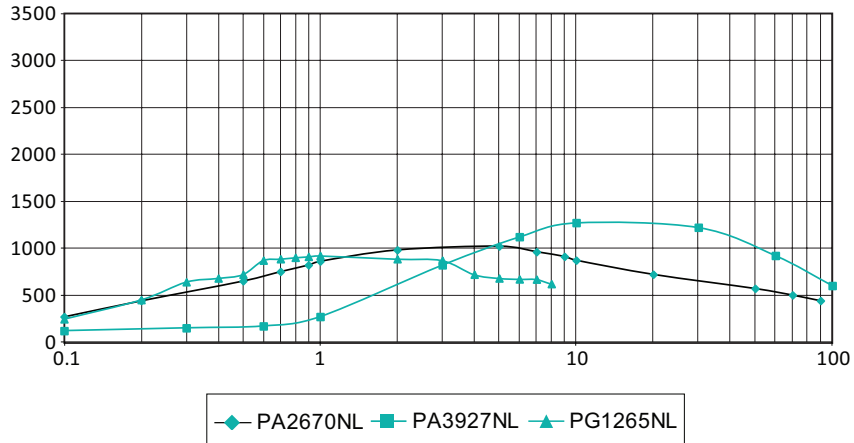
NOTE:

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

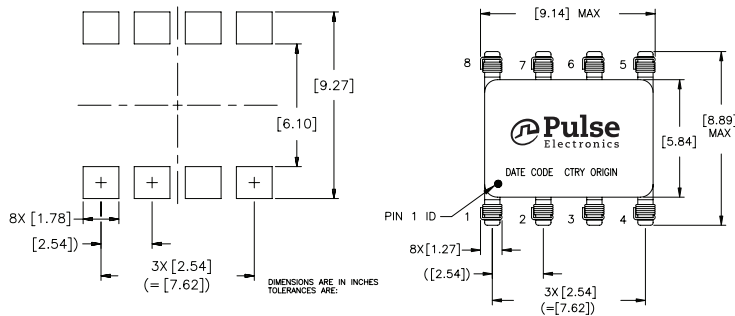


SMT Common Mode Chokes

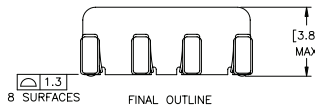
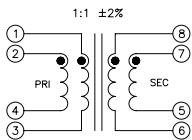
1.0A to 20.0A

Mechanics

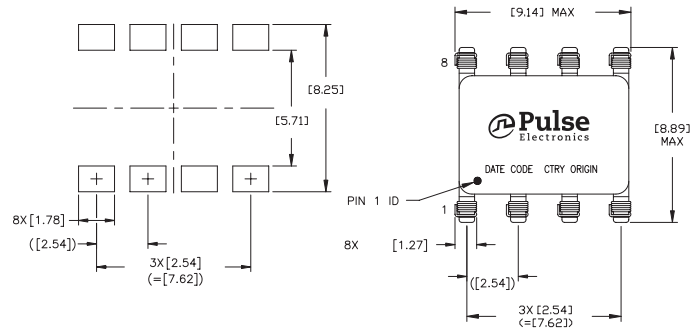
Low Shasta - PA2741NL



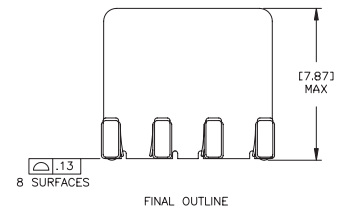
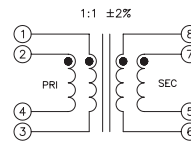
Schematic



High Shasta - PA2742NL

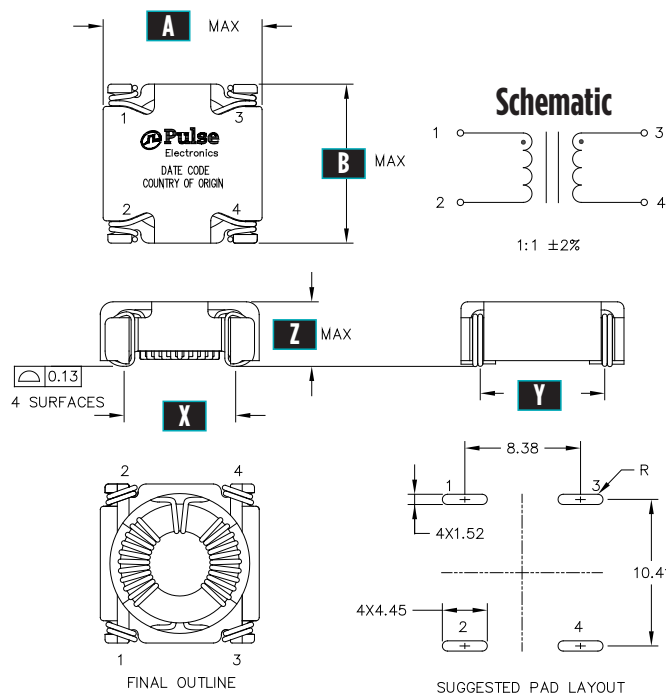


Schematic



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 |

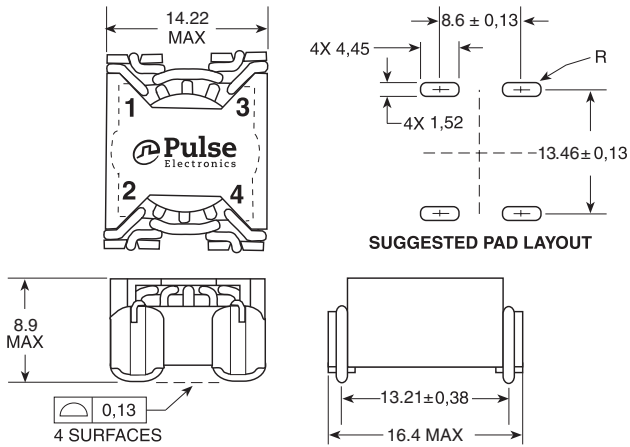
SMT Common Mode Chokes

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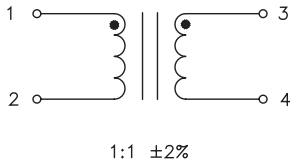


Mechanicals

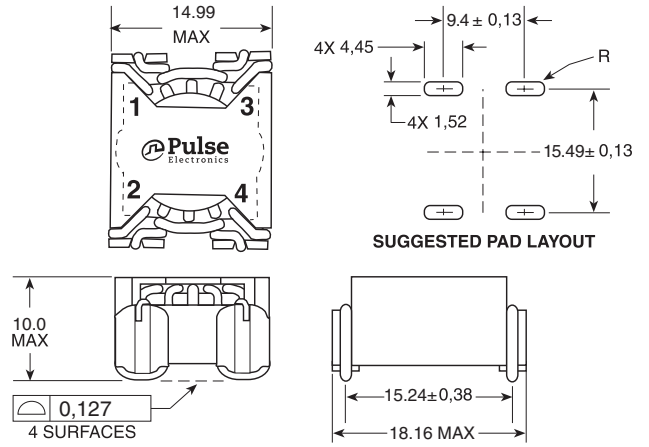
LCCI-37 - PA2749NL



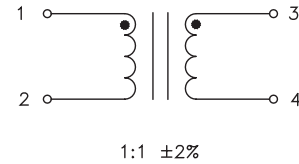
Schematic



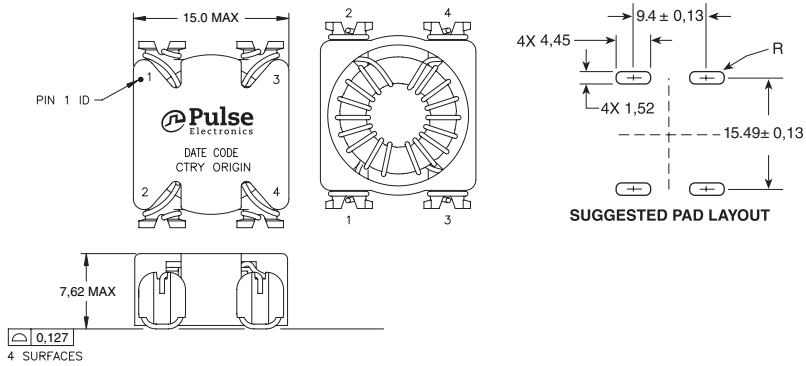
LCCI-44 - PA2750NL



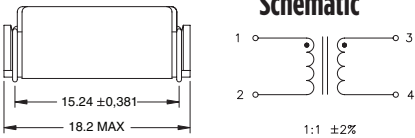
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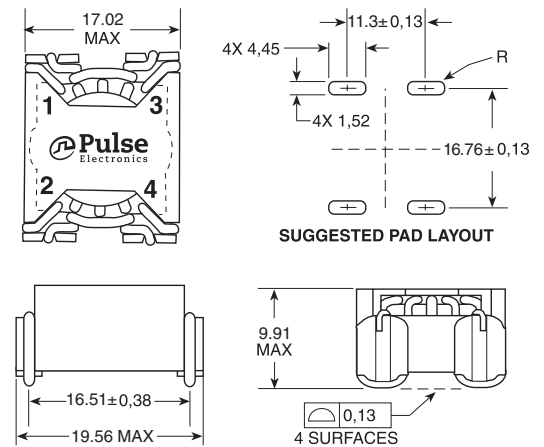
LCCI-44LP - PA2751NL



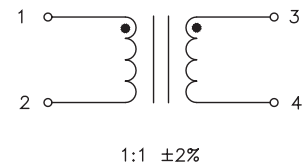
Schematic



LCCI-50 - PA2752NL



Schematic

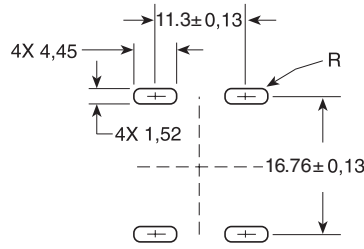
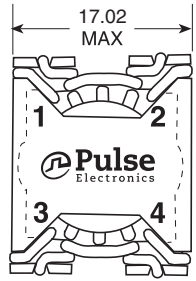


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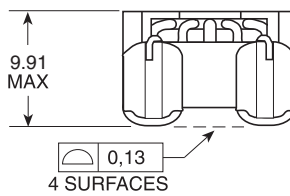
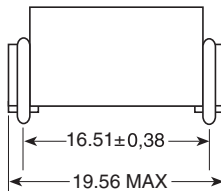
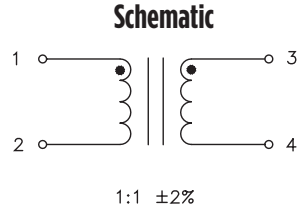
1.0A to 20.0A

Mechanicals

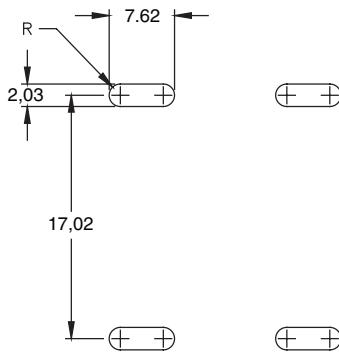
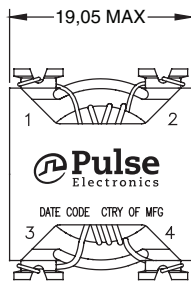
LCCI-50 - PA2753NL and PA2756NL



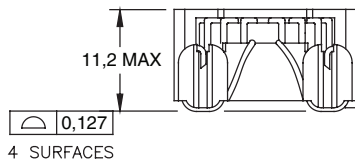
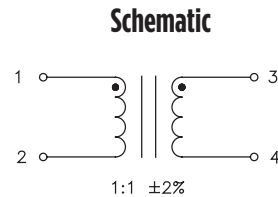
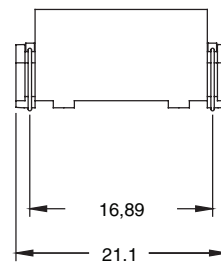
SUGGESTED PAD LAYOUT



Makeni - PA2754NL, PA2755NL



SUGGESTED PAD LAYOUT



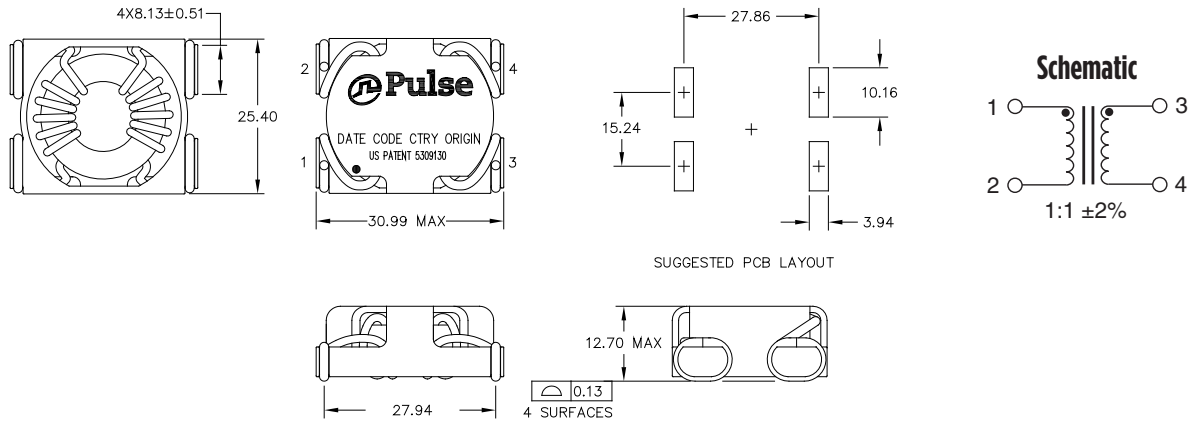
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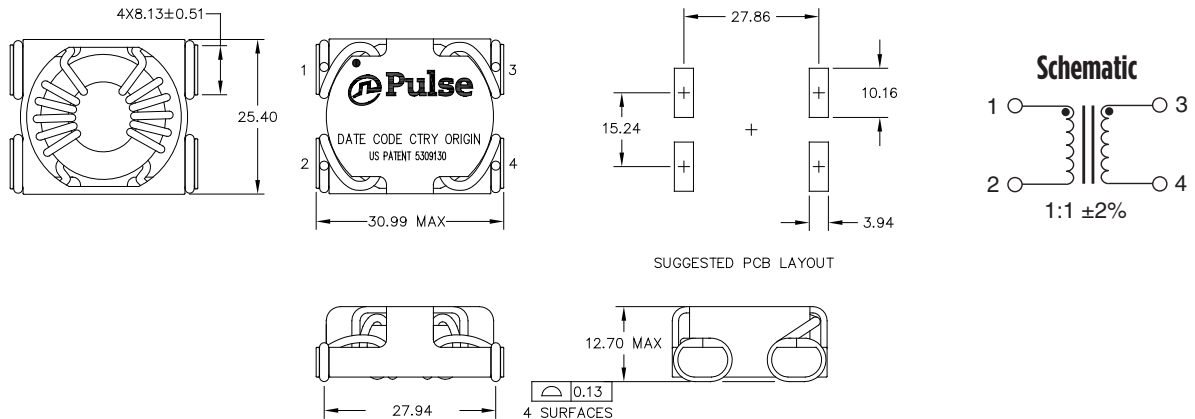


Mechanical

HCCI-80 - PA2757NL



HCCI-80 - PA2670NL and PG1265NL



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