

Tunable Inductor and Transformer Data Sheets

PGV Series

Piconics PGV series is a ceramic-based, tunable, chip inductor in a rectangular molded case, which is dovetailed into the substrate to prevent separation. This leadless inductor is ideal for thick and thin film circuitry since, it can be mounted by reflow soldering. It uses a headless tuning screw for adjustment. The internal connections are welded to prevent loosening during soldering. The PGV series is listed in the qualified products list (QPL) M83446 under the identifier M83446/16. PGV series devices have numerous applications in high-density commercial and military communications and instrumentation circuitry.

FEATURES:

- Top Tuning
- Reflow Soldering
- High Packing Density
- High Reliability
- Headless Self-Locking Adjustment screw

ABSOLUTE MAXIMUM RATINGS:

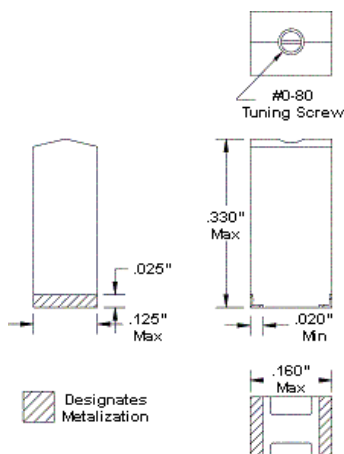
- Operating temperature: -55° C to +125° C
- Storage temperature: -55° C to +125° C
- Dielectric withstanding voltage: Method 301 of MIL-STD-202, test voltage 700 volts rms.
- Barometric pressure: Method 105, test condition C, MIL-STD-202, test (70,000), test voltage 200 volts rms.

PHYSICAL CHARACTERISTICS:

- Termination: Alumina substrate base; gold plated over nickel; welded internal connection
- Case: Diallyl Phthalate.
- Weight: .05 gram maximum

NOTES:

- To tune coil, we recommend jeweler's screwdriver .040" blade.



| Part number | Lmax uH | Lmin uH | QMin at Lmax | Test Freq Mhz | SRF Min MHZ | DCR Max Ohms | Idc Max mA |
|-------------|---------|---------|--------------|---------------|-------------|--------------|------------|
| PGV160-81 | .016 | .012 | 50 | 200 | 250 | .05 | 250 |
| PGV250-81 | .025 | .020 | 50 | 200 | 1050 | .10 | 250 |
| PGV510-81 | .051 | .036 | 40 | 100 | 740 | .19 | 250 |
| PGV760-81 | .076 | .054 | 40 | 100 | 600 | .30 | 250 |
| PGV101-81 | .10 | .071 | 30 | 25 | 530 | .48 | 250 |
| PGV131-81 | .13 | .093 | 30 | 25 | 525 | .51 | 200 |
| PGV151-81 | .15 | .11 | 30 | 25 | 500 | .52 | 200 |
| PGV181-81 | .18 | .13 | 30 | 25 | 470 | .60 | 180 |
| PGV221-81 | .22 | .16 | 30 | 25 | 400 | .67 | 180 |
| PGV271-81 | .27 | .19 | 30 | 25 | 350 | .75 | 180 |
| PGV331-81 | .33 | .24 | 30 | 25 | 320 | .90 | 140 |
| PGV371-81 | .37 | .26 | 30 | 25 | 275 | .93 | 140 |
| PGV471-81 | .47 | .34 | 30 | 25 | 255 | .97 | 100 |
| PGV561-81 | .56 | .40 | 30 | 25 | 230 | 1.1 | 100 |
| PGV681-81 | .68 | .49 | 30 | 25 | 190 | 1.2 | 100 |
| PGV761-81 | .76 | .57 | 30 | 25 | 170 | 1.3 | 100 |
| PGV821-81 | .82 | .59 | 30 | 25 | 150 | 1.3 | 100 |
| PGV951-81 | .95 | .68 | 30 | 25 | 145 | 1.4 | 100 |
| PGV102-61 | 1.0 | .67 | 25 | 25 | 140 | 1.5 | 100 |
| PGV152-61 | 1.5 | 1.0 | 25 | 7.9 | 110 | 1.5 | 100 |
| PGV222-61 | 2.2 | 1.5 | 25 | 7.9 | 100 | 2.1 | 80 |
| PGV272-61 | 2.7 | 1.8 | 25 | 7.9 | 89 | 2.4 | 75 |
| PGV332-61 | 3.3 | 2.2 | 25 | 7.9 | 77 | 2.7 | 65 |
| PGV472-61 | 4.7 | 3.1 | 25 | 7.9 | 49 | 3.3 | 60 |
| PGV582-61 | 5.8 | 3.9 | 25 | 7.9 | 38 | 4.2 | 58 |
| PGV682-61 | 6.8 | 4.5 | 25 | 7.9 | 36 | 4.5 | 55 |
| PGV822-61 | 8.2 | 5.5 | 25 | 7.9 | 21 | 4.5 | 55 |
| PGV103-3F | 10 | 6.0 | 25 | 7.9 | 20 | 4.5 | 55 |
| PGV133-3F | 13 | 6.5 | 25 | 2.5 | 19 | 4.5 | 53 |
| PGV163-3F | 16 | 8.0 | 25 | 2.5 | 16 | 5.1 | 50 |
| PGV203-3F | 20 | 10 | 25 | 2.5 | 14 | 5.3 | 43 |
| PGV223-3F | 22 | 11 | 25 | 2.5 | 12 | 6.0 | 43 |
| PGV303-3F | 30 | 15 | 25 | 2.5 | 11 | 6.7 | 40 |
| PGV363-3F | 36 | 18 | 25 | 2.5 | 10 | 7.5 | 40 |
| PGV473-3F | 47 | 24 | 25 | 2.5 | 6.5 | 8.5 | 39 |
| PGV563-3F | 56 | 28 | 25 | 2.5 | 6.3 | 10 | 35 |
| PGV683-3F | 68 | 34 | 25 | 2.5 | 6.2 | 12 | 30 |
| PGV753-3F | 75 | 38 | 25 | 2.5 | 5.9 | 13 | 30 |
| PGV863-3F | 86 | 43 | 25 | 2.5 | 5.6 | 15 | 28 |
| PGV104-3F | 100 | 50 | 20 | 2.5 | 5.3 | 18 | 27 |
| PGV124-3F | 120 | 60 | 20 | .79 | 4.4 | 21 | 25 |
| PGV154-1F | 150 | 75 | 20 | .79 | 4.0 | 27 | 22 |
| PGV474-1F | 470 | 235 | 20 | .79 | 2.1 | 45 | 16 |
| PGV684-1F | 680 | 340 | 20 | .79 | 2.1 | 52 | 15 |
| PGV105-1F | 1000 | 500 | 18 | .79 | 1.0 | 112 | 11 |