

# SMT POWER INDUCTORS

## Shielded Drum Core - PG0040/41 Series



- Height:** 2.0mm Max
- Footprint:** 6.7mm x 4.5mm Max
- Current Rating:** up to 1.2A
- Inductance Range:** 0.7 $\mu$ H to 3500 $\mu$ H

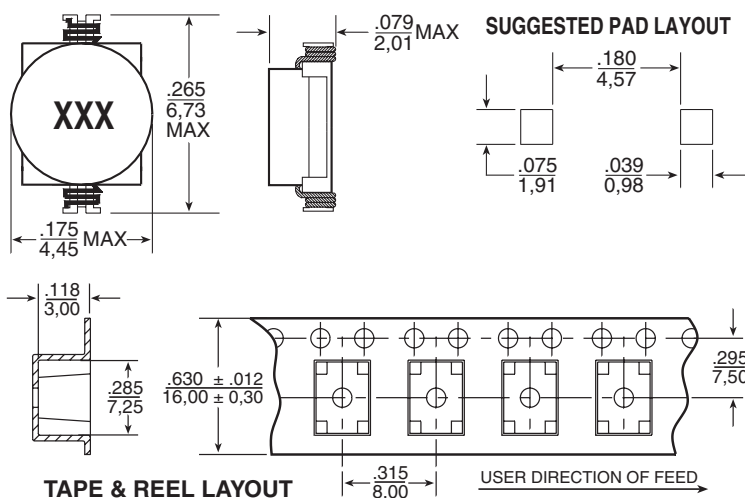
### Electrical Specifications @ 25°C — Operating Temperature -40°C to +130°C

| Part <sup>2,3</sup><br>Number | Inductance<br>@0A <sub>DC</sub><br>( $\mu$ H $\pm$ 20%) | Inductance<br>@I <sub>rated</sub><br>( $\mu$ H TYP) | I <sub>rated</sub> <sup>5</sup><br>(A) | DCR (m $\Omega$ ) |       | Saturation <sup>6</sup><br>Current<br>-30% (A) | Heating <sup>7</sup><br>Current I <sub>cc</sub><br>+30°C (A) | Core Loss <sup>8</sup><br>Factor<br>(K2) | SRF<br>(MHz) |
|-------------------------------|---|---|--|-------------------|-------|--|--|--|--------------|
|                               |   |   |  | TYP               | MAX   |  |  |  |              |
| <b>PG0040 SERIES</b>          |   |   |  |                   |       |  |  |  |              |
| PG0040.102                    | 1.0   | 0.7   | 1.2                                    | 30                | 40    | 1.2  | 2.2  | 3000                                     | >40          |
| PG0040.152                    | 1.5   | 1.0   | 1.0                                    | 40                | 54    | 1.0  | 1.9  | 3500                                     | >40          |
| PG0040.222                    | 2.2   | 1.5   | .960                                   | 50                | 64    | .960   | 1.6  | 4200                                     | >40          |
| PG0040.332                    | 3.3   | 2.3   | .750                                   | 55                | 68    | .750   | 1.3  | 4600                                     | >40          |
| PG0040.472                    | 4.7   | 3.3   | .650                                   | 65                | 74    | .650   | 1.1  | 5800                                     | 32           |
| PG0040.682                    | 6.8   | 4.8   | .500                                   | 75                | 89    | .500   | 1.0  | 6800                                     | 24           |
| PG0040.103                    | 10  | 7.0   | .400                                   | 80                | 106   | .400   | .800   | 8400                                     | 18           |
| PG0040.153                    | 15  | 10.5  | .300                                   | 120               | 154   | .300   | .600   | 10000                                    | 13           |
| PG0040.223                    | 22  | 15.4  | .230                                   | 163               | 188   | .230   | .500   | 13000                                    | 12           |
| PG0040.333                    | 33  | 23.1  | .205                                   | 240               | 278   | .205   | .400   | 15000                                    | 10           |
| PG0040.473                    | 47  | 32.9  | .195                                   | 360               | 406   | .195   | .330   | 18000                                    | 9.0          |
| PG0040.683                    | 68  | 47.6  | .150                                   | 550               | 594   | .150   | .270   | 22000                                    | 7.0          |
| PG0040.104                    | 100   | 70  | .120                                   | 810               | 857   | .120   | .250   | 27000                                    | 5.0          |
| PG0040.154                    | 150   | 105   | .105                                   | 1210              | 1397  | .105   | .190   | 33000                                    | 4.0          |
| PG0040.224                    | 220   | 154   | .096                                   | 1550              | 1683  | .096   | .150   | 40000                                    | 3.0          |
| <b>PG0041 SERIES</b>          |   |   |  |                   |       |  |  |  |              |
| PG0041.334                    | 330   | 231   | .070                                   | 2350              | 2650  | .070   | .120   | 49000                                    | 2.8          |
| PG0041.474                    | 470   | 329   | .062                                   | 3620              | 3830  | .062   | .105   | 58000                                    | 2.6          |
| PG0041.604                    | 600   | 420   | .048                                   | 4230              | 4520  | .048   | .096   | 65000                                    | 2.2          |
| PG0041.684                    | 680   | 476   | .045                                   | 4700              | 4800  | .045   | .090   | 70000                                    | 1.6          |
| PG0041.824                    | 820   | 574   | .040                                   | 5700              | 6350  | .040   | .080   | 77000                                    | 1.2          |
| PG0041.105                    | 1000  | 700   | .035                                   | 6600              | 6800  | .035   | .076   | 84000                                    | 1.0          |
| PG0041.205                    | 2000  | 1400  | .032                                   | 14700             | 15600 | .032   | .054   | 120000                                   | 0.9          |
| PG0041.305                    | 3000  | 2100  | .024                                   | 24700             | 26000 | .024   | .042   | 150000                                   | 0.7          |

NOTES FROM TABLE: (See page 43)

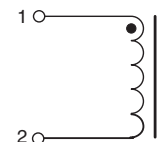
## Mechanical

## Schematic



Weight . . . . . 0.1 grams  
Tape & Reel . . . . . 2500/reel

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$   
Unless otherwise specified,  
all tolerances are  $\pm \frac{.010}{0,25}$



PG0040/PG0041 TYPICAL INDUCTANCE VS. DC BIAS

