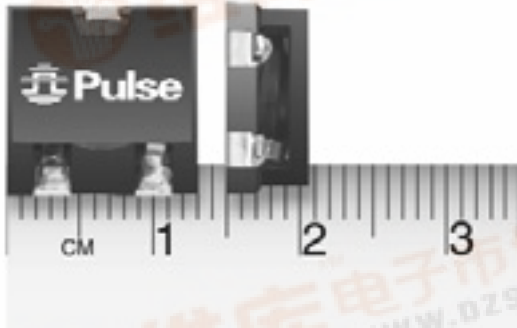


# SMT POWER INDUCTORS

## Flat Coil Series



- Low profile and suitable for compact surface area mounting
- Large permissible DC current
- Low DC resistance
- Robust design

### Electrical Specifications @ 25°C — Operating Temperature -40°C to 100°C

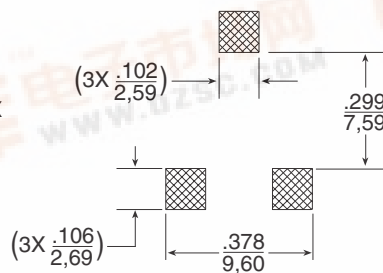
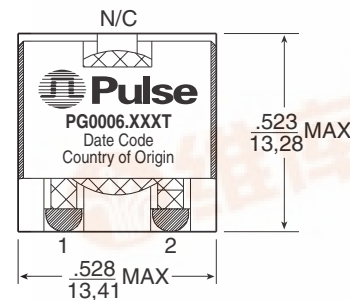
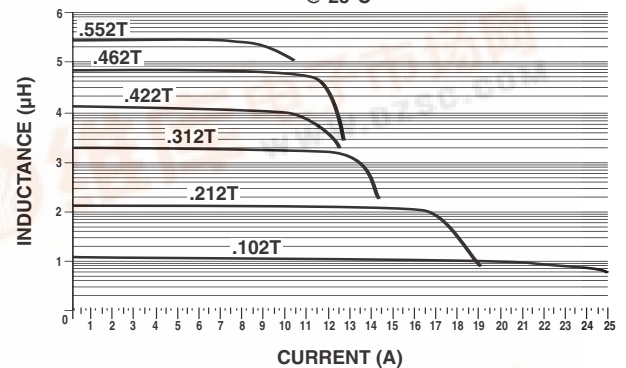
| Part Number | Reference Values   |                                         |                   | Control Values                            |                          |
|-------------|--------------------|-----------------------------------------|-------------------|-------------------------------------------|--------------------------|
|             | $I_{SAT}^1$<br>(A) | $L @ I_{SAT}, L_{SAT}^2$<br>( $\mu H$ ) | $I_{DC}^3$<br>(A) | $L$ w/o DC, $L_0 \pm 20\%$<br>( $\mu H$ ) | DCR MAX<br>(m $\Omega$ ) |
| PG0006.102T | 20                 | 0.90                                    | 15.0              | 1.0                                       | 1.75                     |
| PG0006.212T | 15                 | 1.89                                    | 12.0              | 2.1                                       | 3.60                     |
| PG0006.312T | 12                 | 2.79                                    | 9.0               | 3.1                                       | 7.50                     |
| PG0006.422T | 10                 | 3.78                                    | 8.5               | 4.2                                       | 7.50                     |
| PG0006.462T | 9                  | 4.14                                    | 8.0               | 4.6                                       | 10.40                    |
| PG0006.552T | 8                  | 4.95                                    | 7.5               | 5.5                                       | 12.40                    |

#### NOTES:

- $I_{SAT}$  value is the current that will make inductance drop by  $\leq 10\%$ .
- $L_{SAT}$  value is a typical inductance value, once the inductor is subjected to  $I_{SAT}$ .
- $I_{DC}$  is the current that will make a temperature rise ( $\Delta t$ ) of  $< 40^\circ C$ .
- All measurements are done at room temperature ( $25^\circ C$ ), 100 kHz, 250 mV.

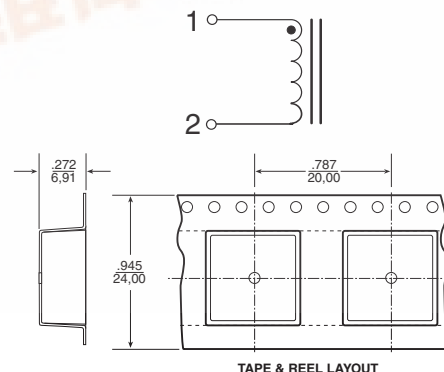
### Mechanical

### TYPICAL INDUCTANCE VS. DC BIAS @ 25°C



### SUGGESTED PAD LAYOUT

### Schematic



Weight . . . . . 3.0 grams

Tape & Reel . . . . . 340/reel

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$

