

**Type 3622 Series**

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The 3622 Series is an innovative design for a high power SMD choke. It combines Tyco quality with low price and high long-term reliability. The layout and profile make it a highly appropriate component for modern industrial equipment, power supplies, bench test instruments, and automotive requirements where long life and high reliability are key design requirements.

**Key Features**

- Low Profile Construction
- Wide Value Range
- Isat up to 30A
- Irms up to 10A
- Rapid Response
- Taped and Reeled
- Available in 4 sizes

**PRODUCT  
PLANNED FOR  
EOL**

**LTB 18/08/2023**

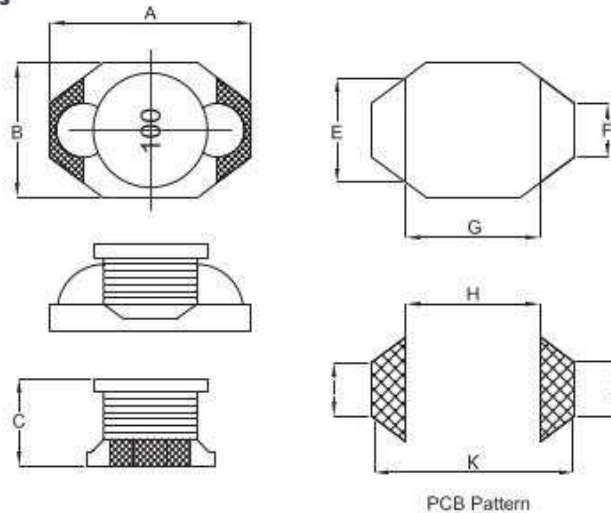
**Electrical Characteristics - 3622A Series**

| Inductance Code | Inductance (μH) | Tolerance (%) | S.R.F. (MHz) Typ. | R.D.C. (Ω) Max. | Isat (A) | Irms (A) |
|-----------------|-----------------|---------------|-------------------|-----------------|----------|----------|
| 1R0             | 1.0             | 20            | 130               | 0.05            | 2.90     | 2.90     |
| 1R5             | 1.5             | 20            | 115               | 0.05            | 2.60     | 2.80     |
| 2R2             | 2.2             | 20            | 90                | 0.07            | 2.30     | 2.40     |
| 3R3             | 3.3             | 20            | 70                | 0.08            | 2.00     | 2.00     |
| 4R7             | 4.7             | 20            | 50                | 0.09            | 1.50     | 1.50     |
| 6R8             | 6.8             | 20            | 45                | 0.13            | 1.20     | 1.40     |
| 100             | 10.0            | 20            | 35                | 0.16            | 1.10     | 1.10     |
| 150             | 15.0            | 20            | 30                | 0.23            | 0.90     | 1.00     |
| 220             | 22.0            | 20            | 20                | 0.37            | 0.70     | 0.80     |
| 330             | 33.0            | 20            | 15                | 0.51            | 0.58     | 0.60     |
| 470             | 47.0            | 20            | 14                | 0.64            | 0.50     | 0.50     |
| 680             | 68.0            | 20            | 11                | 0.86            | 0.40     | 0.40     |
| 101             | 100.0           | 20            | 9                 | 1.27            | 0.31     | 0.30     |
| 151             | 150.0           | 20            | 6                 | 2.00            | 0.27     | 0.25     |
| 221             | 220.0           | 20            | 5.5               | 3.11            | 0.22     | 0.20     |
| 331             | 330.0           | 20            | 5                 | 3.80            | 0.18     | 0.16     |
| 471             | 470.0           | 20            | 4                 | 5.06            | 0.16     | 0.15     |
| 681             | 680.0           | 20            | 3                 | 9.20            | 0.14     | 0.12     |
| 102             | 1000.0          | 20            | 2                 | 13.80           | 0.10     | 0.07     |

**Environmental Characteristics - 3622A Series**

|                 |   |
|-----------------|---|
| Storage Temp:   | -40°C to +125°C                               |
| Operating Temp: | -40°C to +105°C                               |
| Rated Current:  | DC Current base on temp. rise & ΔL/L=10% typ. |
| Temp. Rise:     | 15°C typ.                                     |

**Dimensions 3622A Series**



| Series | A        | B         | C         | E         | F         | G         | H         | I         | J         | K         |
|--------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 3622A  | 6.6 max. | 4.45 max. | 2.92 max. | 3.05 typ. | 1.27 typ. | 4.32 typ. | 4.10 ref. | 1.60 ref. | 3.00 ref. | 7.00 ref. |

**Type 3622 Series**

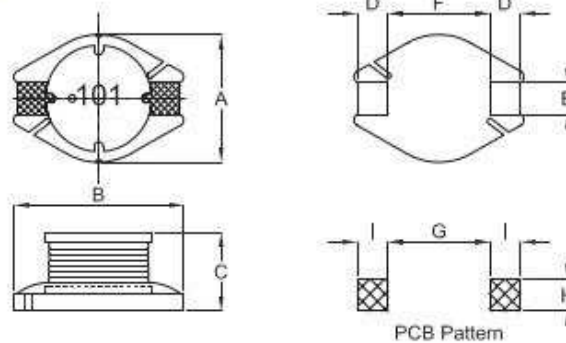
**Electrical Characteristics -  
3622B Series**

| Inductance Code | Inductance (µH) | Tolerance (%) | R.D.C. (Ω) Max. | I <sub>rms</sub> (A) Max. | I <sub>sat</sub> (A) Typ. |
|-----------------|-----------------|---------------|-----------------|---------------------------|---------------------------|
| 3R3             | 3.3             | 20            | 0.022           | 5.00                      | 5.20                      |
| 4R7             | 4.7             | 20            | 0.028           | 4.20                      | 4.00                      |
| 6R8             | 6.8             | 20            | 0.040           | 3.40                      | 3.40                      |
| 100             | 10.0            | 20            | 0.050           | 3.00                      | 2.80                      |
| 150             | 15.0            | 20            | 0.070           | 2.40                      | 2.30                      |
| 220             | 22.0            | 20            | 0.100           | 2.00                      | 1.85                      |
| 330             | 33.0            | 20            | 0.145           | 1.72                      | 1.54                      |
| 470             | 47.0            | 15            | 0.200           | 1.40                      | 1.28                      |
| 680             | 68.0            | 15            | 0.270           | 1.20                      | 1.15                      |
| 101             | 100.0           | 15            | 0.400           | 1.00                      | 0.92                      |
| 151             | 150.0           | 15            | 0.560           | 0.75                      | 0.75                      |
| 221             | 220.0           | 15            | 0.860           | 0.62                      | 0.62                      |
| 331             | 330.0           | 15            | 1.500           | 0.46                      | 0.50                      |

**Environmental Characteristics -  
3622B Series**

|                 |                 |
|-----------------|-----------------|
| Storage Temp:   | -40°C to +125°C |
| Operating Temp: | -40°C to +105°C |
| Temp. Rise:     | 40°C max.       |

**Dimensions  
3622B Series**



| Series | A       | B        | C       | D       | E       | F       | G        | H        | I        |
|--------|---------|----------|---------|---------|---------|---------|----------|----------|----------|
| 3622B  | 8.0±0.2 | 10.5±0.2 | 5.0±0.3 | 2.1±0.2 | 2.0±0.2 | 6.0±0.3 | 5.7 ref. | 2.2 ref. | 2.4 ref. |

**Type 3622 Series**

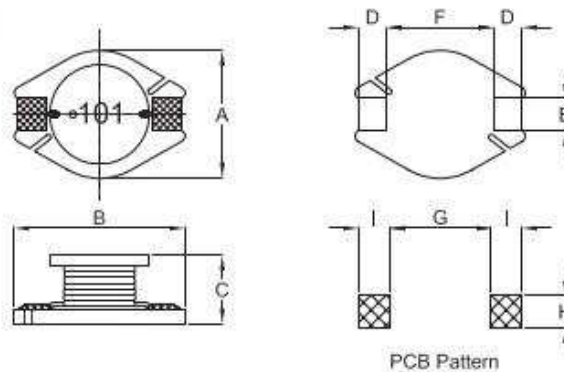
**Electrical Characteristics - 3622C Series**

| Inductance Code | Inductance (μH) 0.1 V / 100 KHz | Tolerance (%) | R.D.C. (Ω) Max. | S.R.F. (MHz) Typ. | Isat (A) | Irms (A) |
|-----------------|---------------------------------|---------------|-----------------|-------------------|----------|----------|
| 1R0             | 1.0                             | 20            | 0.007           | 130.0             | 7.50     | 9.00     |
| 1R5             | 1.5                             | 20            | 0.009           | 90.0              | 6.50     | 8.00     |
| 2R5             | 2.5                             | 20            | 0.012           | 65.0              | 5.50     | 7.00     |
| 3R3             | 3.3                             | 20            | 0.015           | 50.0              | 5.00     | 6.40     |
| 4R7             | 4.7                             | 20            | 0.019           | 45.0              | 4.50     | 5.40     |
| 6R8             | 6.8                             | 20            | 0.034           | 35.0              | 3.40     | 4.50     |
| 100             | 10.0                            | 20            | 0.045           | 25.0              | 2.90     | 3.70     |
| 150             | 15.0                            | 20            | 0.060           | 23.0              | 2.50     | 3.00     |
| 220             | 22.0                            | 20            | 0.095           | 18.0              | 2.00     | 2.50     |
| 330             | 33.0                            | 10            | 0.120           | 15.0              | 1.80     | 2.00     |
| 470             | 47.0                            | 10            | 0.190           | 12.0              | 1.40     | 1.60     |
| 680             | 68.0                            | 10            | 0.240           | 10.0              | 1.20     | 1.40     |
| 101             | 100.0                           | 10            | 0.330           | 8.0               | 1.00     | 1.20     |
| 151             | 150.0                           | 10            | 0.590           | 6.0               | 0.80     | 1.00     |
| 221             | 220.0                           | 10            | 0.780           | 5.0               | 0.70     | 0.80     |
| 331             | 330.0                           | 10            | 1.150           | 4.0               | 0.55     | 0.60     |
| 471             | 470.0                           | 10            | 1.700           | 3.5               | 0.45     | 0.50     |
| 681             | 680.0                           | 10            | 2.600           | 3.0               | 0.35     | 0.40     |
| 102             | 1000.0                          | 10            | 3.900           | 2.0               | 0.30     | 0.30     |
| 152             | 1500.0                          | 10            | 6.300           | 1.9               | 0.25     | 0.25     |
| 222             | 2200.0                          | 10            | 8.200           | 1.6               | 0.20     | 0.20     |
| 332             | 3300.0                          | 10            | 14.000          | 1.2               | 0.16     | 0.17     |
| 472             | 4700.0                          | 10            | 17.000          | 1.1               | 0.15     | 0.15     |
| 682             | 6800.0                          | 10            | 30.000          | 0.9               | 0.11     | 0.12     |
| 103             | 10000.0                         | 10            | 39.000          | 0.7               | 0.10     | 0.10     |

**Environmental Characteristics - 3622C Series**

|                 |                 |
|-----------------|-----------------|
| Storage Temp:   | -40°C to +125°C |
| Operating Temp: | -40°C to +105°C |
| Temp. Rise:     | 15°C typ.       |

**Dimensions 3622C Series**



| Series | A        | B        | C       | D       | E       | F       | G        | H        | I        |
|--------|----------|----------|---------|---------|---------|---------|----------|----------|----------|
| 3622C  | 10.0±0.2 | 12.7±0.3 | 5.0±0.3 | 2.4±0.2 | 2.5±0.2 | 7.6±0.3 | 7.3 ref. | 2.8 ref. | 3.0 ref. |

**Type 3622 Series**

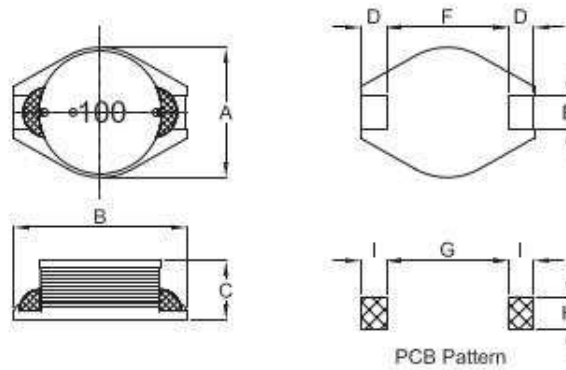
**Electrical Characteristics - 3622D Series**

| Inductance Code | Inductance (µH) | Tolerance (%) | S.R.F. (MHz) Typ. | R.D.C. (Ω) Max. | I <sub>rms</sub> (A) | I <sub>sat</sub> (A) |
|-----------------|-----------------|---------------|-------------------|-----------------|----------------------|----------------------|
| 1R0             | 1.0             | 20            | 100.0             | 0.004           | 10.00                | 30.00                |
| 2R2             | 2.2             | 20            | 55.0              | 0.0068          | 9.00                 | 22.00                |
| 3R3             | 3.3             | 20            | 40.0              | 0.0098          | 7.60                 | 17.00                |
| 5R6             | 5.6             | 20            | 30.0              | 0.015           | 6.40                 | 12.80                |
| 100             | 10.0            | 20            | 25.0              | 0.025           | 5.30                 | 10.00                |
| 150             | 15.0            | 20            | 17.0              | 0.035           | 4.30                 | 8.00                 |
| 220             | 22.0            | 20            | 13.0              | 0.045           | 3.60                 | 6.70                 |
| 330             | 33.0            | 20            | 11.0              | 0.068           | 3.00                 | 5.40                 |
| 470             | 47.0            | 20            | 9.0               | 0.095           | 2.50                 | 4.60                 |
| 680             | 68.0            | 20            | 8.0               | 0.130           | 2.10                 | 3.80                 |
| 101             | 100.0           | 10            | 7.0               | 0.190           | 1.70                 | 3.20                 |
| 151             | 150.0           | 10            | 5.0               | 0.270           | 1.40                 | 2.60                 |
| 221             | 220.0           | 10            | 4.5               | 0.420           | 1.10                 | 2.20                 |
| 331             | 330.0           | 10            | 3.5               | 0.580           | 1.00                 | 1.80                 |
| 471             | 470.0           | 10            | 3.0               | 0.820           | 0.80                 | 1.50                 |
| 681             | 680.0           | 10            | 2.5               | 1.2             | 0.70                 | 1.20                 |
| 102             | 1000.0          | 10            | 2.0               | 1.8             | 0.50                 | 1.00                 |

**Environmental Characteristics - 3622D Series**

|                 |                 |
|-----------------|-----------------|
| Storage Temp:   | -40°C to +125°C |
| Operating Temp: | -40°C to +105°C |
| Temp. Rise:     | 40°C max.       |

**Dimensions 3622D Series**



| Series | A        | B        | C       | D       | E       | F        | G         | H        | I        |
|--------|----------|----------|---------|---------|---------|----------|-----------|----------|----------|
| 3622D  | 14.0±0.5 | 18.3±0.5 | 6.6±0.5 | 2.5±0.2 | 2.6±0.2 | 13.4±0.3 | 12.7 ref. | 2.9 ref. | 3.2 ref. |

**Type 3622 Series**

**Reliability Test - A Series**

| Test Item                           | Specification              | Test Condition  |
|-------------------------------------|----------------------------|---|
| Thermal Shock Test:<br>(Temp Cycle) | $\Delta L/L \leq \pm 30\%$ | Room Temp. $\rightarrow -25 \pm 2^\circ\text{C}$<br>15 minutes $\rightarrow$ 30 minutes<br><br>Room Temp. $\rightarrow 85 \pm 2^\circ\text{C}$<br>15 minutes $\rightarrow$ 30 minutes<br><br>Total: 50 cycles |
| Humidity Resistance Test:           | $\Delta L/L \leq \pm 30\%$ | Temperature: $40 \pm 2^\circ\text{C}$<br>Humidity: 90 – 95%<br>Applied Current: Per spec.<br>Time: 500 hours  |
| High Temp. Resistance Test:         | $\Delta L/L \leq \pm 30\%$ | Temperature: $85 \pm 2^\circ\text{C}$<br>Applied Current: Per spec.<br>Time: 500 hours  |

**Reliability Test - B Series**

| Test Item                           | Specification              | Test Condition  |
|-------------------------------------|----------------------------|---|
| Thermal Shock Test:<br>(Temp Cycle) | $\Delta L/L \leq \pm 20\%$ | Room Temp. $\rightarrow -25 \pm 2^\circ\text{C}$<br>15 minutes $\rightarrow$ 30 minutes<br><br>Room Temp. $\rightarrow 85 \pm 2^\circ\text{C}$<br>15 minutes $\rightarrow$ 30 minutes<br><br>Total: 50 cycles |
| Humidity Resistance Test:           | $\Delta L/L \leq \pm 20\%$ | Temperature: $40 \pm 2^\circ\text{C}$<br>Humidity: 90 – 95%<br>Applied Current: Per spec.<br>Time: 500 hours  |
| High Temp. Resistance Test:         | $\Delta L/L \leq \pm 20\%$ | Temperature: $105 \pm 2^\circ\text{C}$<br>Applied Current: Per spec.<br>Time: 500 hours   |

**Reliability Test - C, D Series**

| Test Item                           | Specification              | Test Condition  |
|-------------------------------------|----------------------------|---|
| Thermal Shock Test:<br>(Temp Cycle) | $\Delta L/L \leq \pm 20\%$ | Room Temp. $\rightarrow -25 \pm 2^\circ\text{C}$<br>15 minutes $\rightarrow$ 30 minutes<br><br>Room Temp. $\rightarrow 85 \pm 2^\circ\text{C}$<br>15 minutes $\rightarrow$ 30 minutes<br><br>Total: 50 cycles |
| Humidity Resistance Test:           | $\Delta L/L \leq \pm 20\%$ | Temperature: $40 \pm 2^\circ\text{C}$<br>Humidity: 90 – 95%<br>Applied Current: Per spec.<br>Time: 500 hours  |
| High Temp. Resistance Test:         | $\Delta L/L \leq \pm 20\%$ | Temperature: $105 \pm 2^\circ\text{C}$<br>Applied Current: Per spec.<br>Time: 500 hours   |

**How to Order**

| 3622               | A             | 1R0                                    | K  |
|--------------------|---------------|--|--|
| <b>Common Part</b> | <b>Style</b>  | <b>Inductance</b>                      | <b>Tolerance</b>                               |
| 3622               | A, B, C, or D | See Relevant Table for Inductance Code | K - $\pm 10\%$<br>L - $\pm 15\%$<br>M - $20\%$ |

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