

## GPxxx Series PPTC Thermistors (PPTC Resettable Fuses)

Shenzhen Goodpoly Electron Co., Ltd.

Radial leaded devices

Very high voltage surge capabilities

Available in lead-free version

Agency Recognition: UL、TUV



### Electrical Characteristics

| Model    | V <sub>max</sub> (v) | R <sub>o</sub> ( ) | I <sub>T</sub> (A) | I <sub>max</sub> (A) | T <sub>T</sub> (s) | I <sub>H</sub> (A) |
|----------|----------------------|--------------------|--------------------|----------------------|--------------------|--------------------|
| GP070    | 15                   | 0.100-0.200        | 1.45               | 100                  | 5.0                | 0.70               |
| GP100    | 24                   | 0.070-0.130        | 2.50               | 100                  | 7.0                | 1.00               |
| GP120    | 15                   | 0.085-0.160        | 2.70               | 100                  | 5.0                | 1.20               |
| GP-CW120 | 15                   | 0.085-0.160        | 2.70               | 100                  | 3.0                | 1.20               |
| GP-CW170 | 15                   | 0.030-0.052        | 3.40               | 100                  | 3.0                | 1.70               |
| GP175    | 15                   | 0.050-0.090        | 3.80               | 100                  | 5.0                | 1.75               |
| GP-CW175 | 15                   | 0.029-0.051        | 3.80               | 100                  | 5.0                | 1.75               |
| GP180    | 24                   | 0.040-0.068        | 3.80               | 100                  | 2.9                | 1.80               |
| GP190    | 24                   | 0.030-0.057        | 4.20               | 100                  | 3.0                | 1.90               |
| GP200    | 24                   | 0.030-0.060        | 4.40               | 100                  | 4.0                | 2.00               |
| GP-CW200 | 15                   | 0.022-0.039        | 4.50               | 100                  | 5.0                | 2.00               |
| GP-CW210 | 15                   | 0.018-0.030        | 4.70               | 100                  | 5.0                | 2.10               |
| GP-CW240 | 15                   | 0.014-0.026        | 5.40               | 100                  | 4.0                | 2.40               |
| GP-CW250 | 15                   | 0.017-0.046        | 5.20               | 100                  | 10.0*              | 2.50               |
| GP260    | 24                   | 0.025-0.042        | 5.20               | 100                  | 5.0                | 2.60               |
| GP300    | 24                   | 0.015-0.031        | 6.30               | 100                  | 4.0                | 3.00               |
| GP310    | 24                   | 0.018-0.030        | 6.00               | 100                  | 5.0                | 3.10               |
| GP340    | 24                   | 0.016-0.027        | 6.80               | 100                  | 5.0                | 3.40               |
| GP350    | 24                   | 0.017-0.031        | 6.30               | 100                  | 3.0**              | 3.50               |
| GP420    | 24                   | 0.012-0.024        | 7.60               | 100                  | 6.0                | 4.20               |

V<sub>max</sub> (V): Maximum device operating voltage.

R<sub>o</sub> ( ): Minimum ~ maximum device resistance at 25 °C prior to tripping.

I<sub>T</sub> ( A ): Tripping current: minimum current at which the device will trip at 25 °C under specified condition.

I<sub>max</sub> ( A ): Maximum fault current device can withstand without damage at rated voltage.

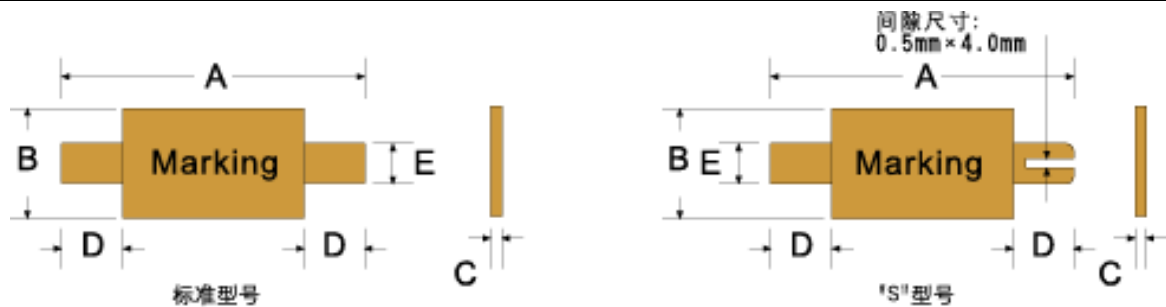
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$T_T$  ( S ): Maximum time to trip at specified current. (Devices tested at 40A.The others tested at 5In)

$I_H$  ( A ): Hold current: maximum current at which the device will not trip at 25 still air.

### Dimensions

| Model    | A <sub>typ</sub> (mm) | B <sub>typ</sub> (mm) | C <sub>typ</sub> (mm) | D <sub>typ</sub> (mm) | E <sub>typ</sub> (mm) |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| GP070    | 20.0                  | 5.2                   | 0.9                   | 6.0                   | 4.0                   |
| GP100    | 20.0                  | 5.2                   | 0.8                   | 6.0                   | 4.0                   |
| GP120    | 20.0                  | 5.2                   | 0.8                   | 6.0                   | 4.0                   |
| GP-CW120 | 22.0                  | 5.2                   | 1.0                   | 5.0                   | 4.0                   |
| GP-CW170 | 17.5                  | 7.3                   | 1.0                   | 5.0                   | 4.0                   |
| GP175    | 22.0                  | 5.2                   | 0.8                   | 5.0                   | 4.0                   |
| GP-CW175 | 22.0                  | 3.8                   | 1.0                   | 5.0                   | 3.2                   |
| GP180    | 22.0                  | 5.2                   | 0.8                   | 5.0                   | 4.0                   |
| GP190    | 22.0                  | 8.2                   | 0.8                   | 6.2                   | 5.0                   |
| GP200    | 22.0                  | 8.2                   | 0.8                   | 6.2                   | 5.0                   |
| GP-CW200 | 25.0                  | 3.8                   | 1.0                   | 5.0                   | 3.2                   |
| GP-CW210 | 23.1                  | 5.3                   | 1.0                   | 5.0                   | 4.0                   |
| GP-CW240 | 33.0                  | 5.3                   | 1.0                   | 5.0                   | 4.0                   |
| GP-CW250 | 43.0                  | 5.3                   | 1.0                   | 13.0                  | 4.0                   |
| GP260    | 22.0                  | 8.2                   | 0.8                   | 6.2                   | 5.0                   |
| GP300    | 27.0                  | 13.3                  | 0.8                   | 6.0                   | 5.0                   |
| GP310    | 27.0                  | 13.3                  | 0.8                   | 6.0                   | 5.0                   |
| GP340    | 27.0                  | 13.3                  | 0.8                   | 6.0                   | 5.0                   |
| GP350    | 27.0                  | 13.3                  | 0.8                   | 6.0                   | 5.0                   |
| GP420    | 31.0                  | 13.3                  | 0.8                   | 6.3                   | 5.0                   |





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### Typical T-I Derating Form

| Model    | -40  | -20  | 0    | 25   | 40   | 50   | 60   | 70   | 85   |
|----------|------|------|------|------|------|------|------|------|------|
| GP070    | 1.32 | 1.21 | 0.99 | 0.70 | 0.63 | 0.60 | 0.50 | 0.39 | 0.26 |
| GP100    | 2.00 | 1.73 | 1.52 | 1.00 | 0.99 | 0.85 | 0.75 | 0.61 | 0.40 |
| GP120    | 1.95 | 1.74 | 1.54 | 1.20 | 1.07 | 0.98 | 0.87 | 0.76 | 0.58 |
| GP-CW170 | 3.20 | 2.70 | 2.20 | 1.70 | 1.30 | 1.10 | 0.80 | 0.60 |      |
| GP175    | 2.57 | 2.36 | 2.07 | 1.75 | 1.59 | 1.39 | 1.27 | 1.18 | 0.99 |
| GP-CW175 | 3.20 | 2.70 | 2.20 | 1.75 | 1.30 | 1.00 | 0.80 | 0.50 |      |
| GP180    | 3.23 | 2.88 | 2.35 | 1.80 | 1.48 | 1.20 | 1.10 | 0.75 | 0.45 |
| GP190    | 3.50 | 3.00 | 2.51 | 1.90 | 1.60 | 1.35 | 1.20 | 0.88 | 0.52 |
| GP200    | 3.28 | 2.88 | 2.59 | 2.00 | 1.81 | 1.70 | 1.52 | 1.31 | 1.02 |
| GP-CW200 | 3.70 | 3.20 | 2.60 | 2.00 | 1.50 | 1.20 | 0.90 | 0.50 |      |
| GP-CW210 | 4.10 | 3.50 | 2.90 | 2.10 | 1.60 | 1.30 | 1.00 | 0.70 |      |
| GP-CW240 | 4.40 | 3.70 | 3.10 | 2.40 | 1.80 | 1.50 | 1.20 | 0.90 |      |
| GP-CW250 | 4.60 | 3.90 | 3.30 | 2.50 | 1.90 | 1.60 | 1.40 | 1.20 |      |
| GP260    | 4.40 | 3.80 | 3.19 | 2.60 | 2.10 | 1.80 | 1.49 | 1.19 | 0.70 |
| GP300    | 5.20 | 4.49 | 3.78 | 3.00 | 2.39 | 2.04 | 1.70 | 1.35 | 0.78 |
| GP310    | 5.46 | 4.68 | 3.80 | 3.10 | 2.45 | 2.11 | 1.80 | 1.40 | 0.80 |
| GP340    | 5.60 | 4.88 | 4.10 | 3.40 | 2.70 | 2.33 | 2.00 | 1.60 | 0.89 |
| GP350    | 5.51 | 4.89 | 4.42 | 3.58 | 3.00 | 2.89 | 2.62 | 2.28 | 1.79 |
| GP420    | 6.53 | 5.81 | 5.20 | 4.20 | 3.69 | 3.38 | 3.10 | 2.75 | 2.24 |