

- Surface Mount Package: Pick and Place Compatible
- Moisture Sensitivity Level: 1
- Storage Temperature: -55°C to +130°C
- Reflow Peak Temperature: 235°C

| Electrical Specifications @ 25 °C — Operating Temperature - 55 °C to +130 °C |       |            |                     |               |                 |        |  |
|--|-------|------------|---------------------|---------------|-----------------|--------|--|
| Part 5   | Turns | Current 2  | Secondary           | DCR (mΩ MAX)  |                 | Hipot  |  |
| Number   | Ratio | Rating (A) | Inductance (mH MIN) | Primary (8-7) | Secondary (1-3) | (VRMS) |  |
| PL2035   | 1:50  | 20         | 0.50                | 0.75          | 1500            | 500    |  |

NOTES:

- 1. The temperature of component (ambient temperature plus temper-ature rise) must be within the specified operating temperature range.
- 2. The maximum current rating is based upon temperature rise of the component and represents the DC current which will cause a typical temperature rise of 40°C with no airflow when both one turn windings connected in parallel.

3. To calculate value of terminating resistor (Rt) use the following formula:

Rt (Ω) = VREF \* N / (Ipeak\_primary)

4. The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for unipolar current use following formula:

Bpk = 37.59 \* VREF \* (Duty\_Cycle\_Max) \* 10<sup>5</sup> / (N \* Freq\_kHz)

- \* for bi-polar current applications divide Bpk (as calculated above) by 2.
- 5. Optional Tape & Reel packaging can be ordered by adding a "T" suffix

to the part number (i.e. PL2035 becomes PL2035T).









## Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)

| T <sub>SMIN</sub><br>(°C) | T <sub>SMAX</sub><br>(°C) | T∟<br>(°C) | T <sub>P</sub><br>(°C MAX) | t <sub>s</sub><br>(s) | t <sub>L</sub><br>(s) | t <sub>P</sub><br>(s MAX) | Ramp-up rate<br>(T <sub>L</sub> to T <sub>P</sub> ) | Ramp-down rate<br>(T <sub>P</sub> to T <sub>L</sub> ) | Time<br>25°C to peak temperature<br>(s MAX) |
|---------------------------|---------------------------|------------|----------------------------|-----------------------|-----------------------|---------------------------|---|---|---|
| 100                       | 150                       | 183        | 235                        | 60-120                | 60-150                | 20                        | 3°C/s MAX   | 6°C/s MAX   | 360   |

Notes:

1. All temperatures measured on the package leads.

2. Maximum times of reflow cycle: 2.

## For More Information

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