

- ⊗ 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 Number | Turns Ratio | Current 2 Rating (A) | Secondary Inductance (mH MIN) | DCR (mΩ MAX) | | Hipot (VRMS) |
|------------------|----------------|-------------------------|----------------------------------|---------------|-----------------|-----------------|
| | | | | Primary (8-7) | Secondary (1-3) | |
| PL2035 | 1:50 | 20 | 0.50 | 0.75 | 1500 | 500 |

NOTES:

- The temperature of component (ambient temperature plus temperature rise) must be within the specified operating temperature range.
- 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.
- To calculate value of terminating resistor (Rt) use the following formula:

$$R_t (\Omega) = V_{REF} * N / (I_{peak_primary})$$
- The peak flux density of the device must remain below 2000 Gauss. To calculate the peak flux density for uni-polar current use following formula:

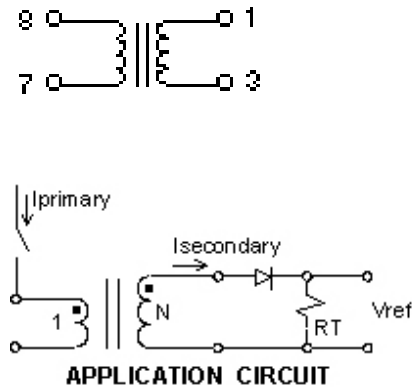
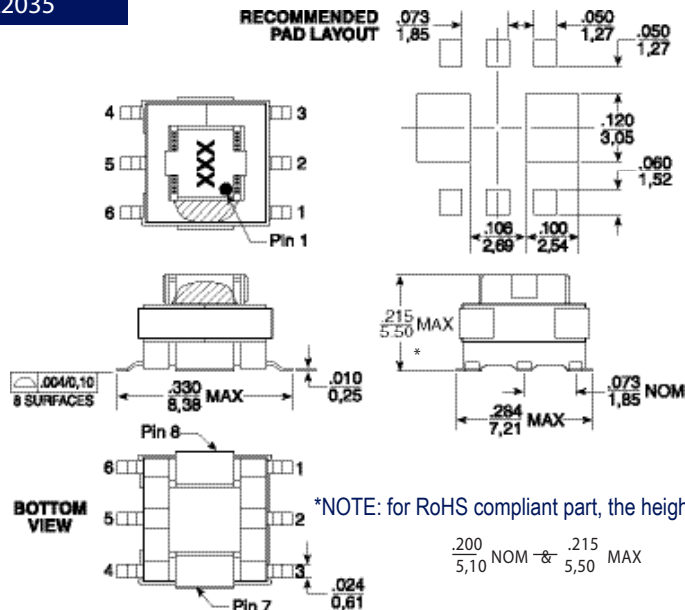
$$B_{pk} = 37.59 * V_{REF} * (Duty_Cycle_Max) * 10^5 / (N * Freq_kHz)$$

* for bi-polar current applications divide Bpk (as calculated above) by 2.
- Optional Tape & Reel packaging can be ordered by adding a "T" suffix to the part number (i.e. PL2035 becomes PL2035T).

Mechanical

Electrical Schematic

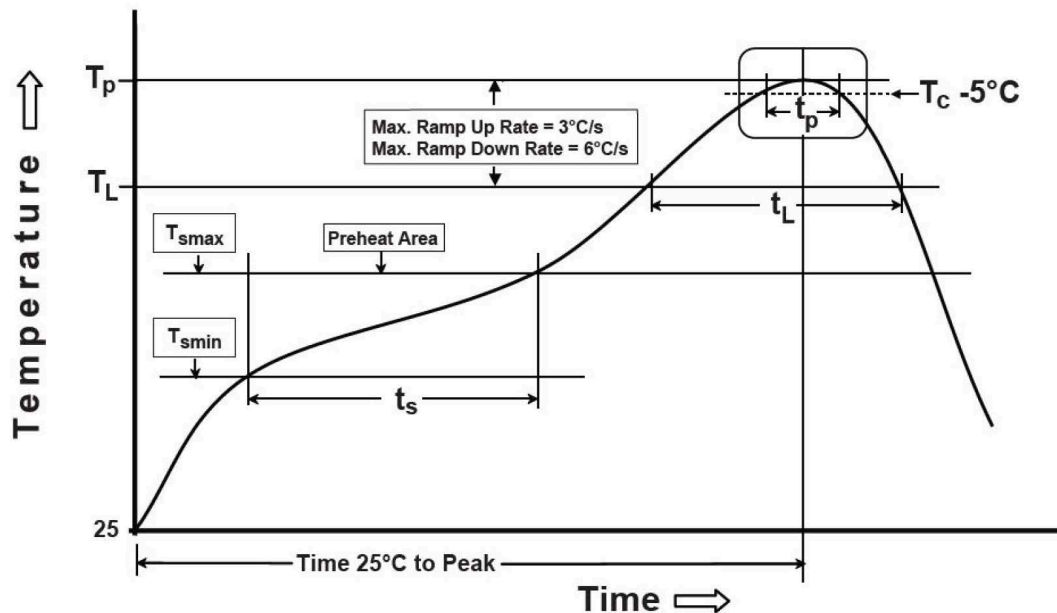
PL2035



Dimensions: $\frac{\text{Inches}}{\text{mm}}$
 Unless otherwise specified, all tolerances are: $\pm \frac{.010}{0.25}$



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



| T_{SMIN} (°C) | T_{SMAX} (°C) | T_L (°C) | T_P (°C MAX) | t_s (s) | t_L (s) | t_p (s MAX) | Ramp-up rate (T_L to T_P) | Ramp-down rate (T_P to T_L) | Time 25°C to peak temperature (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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