
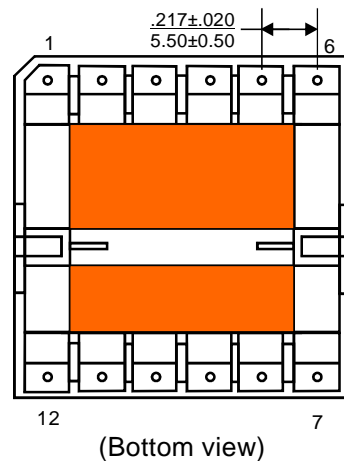
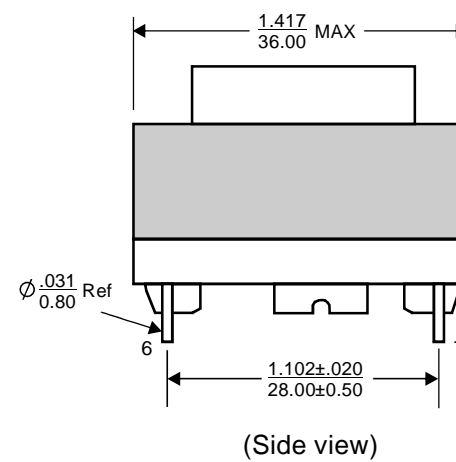
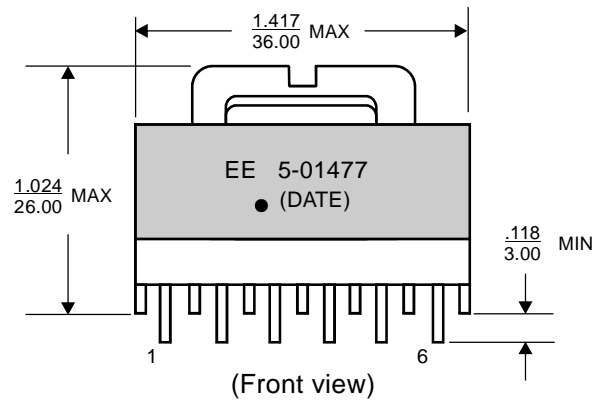


| REVISIONS |                               |         |          |
|-----------|-------------------------------|---------|----------|
| REV.      | DESCRIPTION                   | ECN NO. | DATE     |
| 01        | FIRST RELEASE RFQ#A2019-15059 | N/A     | 02/01/19 |
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PAGE 4.5 IS FOR INTERNAL ONLY

|   |  |  |            |  |             |            |           |           |          |         |           |      |  |  |
|---|--|--|------------|--|-------------|------------|-----------|-----------|----------|---------|-----------|------|--|--|
| PART NUMBER   |  | PART DESCRIPTION                               |            | TITLE                                    |             |            |           |           |          |         |           |      |  |  |
| 835-01477F  |  | RoHS compliant per EU Directive (EU) 2015/863. |            | PXFM, LLC, ETD34, 100uH, 170W, TH, 12PIN |             |            |           |           |          |         |           |      |  |  |
| <p><b>WARNING !</b></p> <p>ALL SHEETS OF THIS DOCUMENT ARE CONTROLLED DOCUMENTATION AND ARE NOT TO BE RELEASED OUTSIDE OF E&amp;E OR ITS SUB-CONTRACTORS WITHOUT AUTHORIZATION.</p> | <p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCH/mm.</p> <p><u>TOLERANCE ARE:</u></p> <table border="0"> <tr> <td>INCH</td> <td>mm</td> <td>ANGLE</td> </tr> <tr> <td>.XXX ± .005</td> <td>.XX ± 0.13</td> <td>X.X ± 0.3</td> </tr> <tr> <td>.XX ± .02</td> <td>.X ± 0.5</td> <td>X. ± 1.</td> </tr> </table> | INCH   | mm         | ANGLE                                    | .XXX ± .005 | .XX ± 0.13 | X.X ± 0.3 | .XX ± .02 | .X ± 0.5 | X. ± 1. | APPROVALS | DATE |  E & E Magnetic Products Ltd. |  |
|   |  | INCH   | mm         | ANGLE                                    |             |            |           |           |          |         |           |      |  |  |
|   |  | .XXX ± .005                                    | .XX ± 0.13 | X.X ± 0.3                                |             |            |           |           |          |         |           |      |  |  |
|   |  | .XX ± .02                                      | .X ± 0.5   | X. ± 1.                                  |             |            |           |           |          |         |           |      |  |  |
|   |  | DRAWN BY                                       |            |  |             |            |           |           |          |         |           |      |  |  |
| PROJ. ENG   | P.NI   | 02/01/19                                       |            | DRAWING NO./MODEL                        |             |            |           |           |          |         |           |      |  |  |
| APPROVED BY   | P.NI   | 02/01/19                                       |            |  |             |            |           |           |          |         |           |      |  |  |
| Q.A.  | J. YANG  | 02/01/19                                       |            | <b>835-01477F</b>                        |             |            |           |           |          |         |           |      |  |  |
|   | W.ZHANG  | 02/01/19                                       |            |  |             | REV        | 01        |           |          |         |           |      |  |  |
|   |  |  |            | SCALE                                    | PAGE        | OF         |           |           |          |         |           |      |  |  |
|   |  |  |            | DO NOT SCALE                             | 1           | 5          |           |           |          |         |           |      |  |  |



## MECHANICAL OUTLINE

1. Dimension are specified in  $\frac{\text{inches}}{\text{mm}}$  with higher precedence in inches.
2. Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0.25}$ .
3. "(DATE)" includes at least the manufacturing date code (in YYWW format) plus manufacturing site code.
4. Dimensions are to be measured in accordance with JEDEC standard 95-1.
5. All pin length don't include tin icicle.



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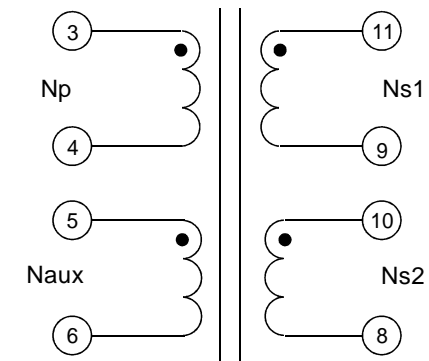
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## ELECTRICAL SPECIFICATION @25°C:

| PARAMETERS                                     | UNIT | LIMITS         |
|--|------|----------------|
| Turns Ratio(3 - 4) : (5 - 6)@20kHz, 1Vrms      | -    | 5.750 : 1 ± 2% |
| Turns Ratio(3 - 4) : (10 - 8)@20kHz, 1Vrms     | -    | 2.555 : 1 ± 2% |
| Turns Ratio(3 - 4) : (11 - 9)@20kHz, 1Vrms     | -    | 2.555 : 1 ± 2% |
| Polarity                                       | -    | Per Schematic  |
| Inductance, Ls(3 - 4)@10kHz, 0.1Vrms           | uH   | 100 ± 10%      |
| LL1(3 - 4), shorted all other@100kHz, 0.1Vrms  | uH   | 10.8 Max       |
| LL2(3 - 4), shorted 8+9+10+11 @100kHz, 0.1Vrms | uH   | 29.0±10%       |
| DCR(3 - 4)                                     | mW   | 55 Max         |
| DCR(5 - 6)                                     | mW   | 135 Max        |
| DCR(10 - 8)                                    | mW   | 25 Max         |
| DCR(11 - 9)                                    | mW   | 25 Max         |
| HIPOT(3, 5) : (10, 11), 1s, 1mA                | Vac  | 3750           |
| HIPOT(3) : (5), 1s, 1mA                        | Vac  | 1000           |
| HIPOT(11) : (10), 1s, 1mA                      | Vac  | 1000           |
| HIPOT(All windings) : (Core), 1s, 1mA          | Vac  | 1000           |

6. Ambient temperature: -40°C to +85°C.
7. Storage temperature Component: -40°C to +125°C, Packaging: -40°C to +85°C.
8. Operating temperature: -40° C to +125° C. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
9. Application:  
The xfmr application is a LLC half-bridge transformer. Primary is Pin 3 to 4, operating at 140V and 60 - 200kHz +/- % , the max duty cycle 50%; Output Pins 9 - 11 & 8 - 10, Output: 34V at 170W, Winding 5 - 6 provides 15V, 7mA to primary side controller, ST Microelectronics L6599, and Boost converter ST Microelectronics L6562.
10. Transformer shall be implemented electrical test for verification by customer according to the application.



**SCHEMATIC**



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