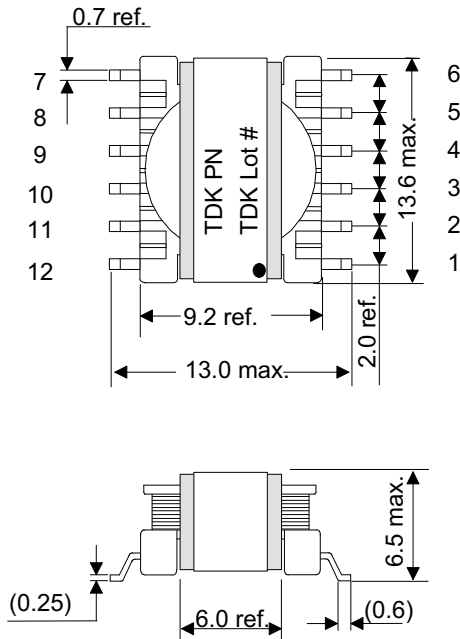


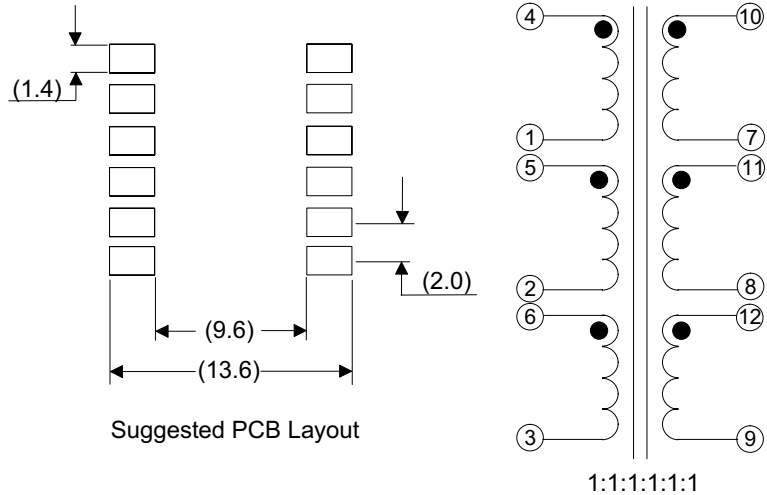
# TDK SMD MULTI WINDING TRANSFORMER

## PCA11/5ER SERIES

Mechanical



Schematic



Suggested PCB Layout

| TDK Part Number   | Inductance<br>uH<br>@ 10KHz, 0.1 Vrms |           | *1 Idc 1<br>Amps<br>(Typ.) |           | *2 Idc 2<br>Amps<br>(Typ.) |           | DCR<br>m Ohms<br>(±15%) |           | ET Constant<br>V-µS<br>(Max.) |           | Leakage<br>Inductance<br>nH<br>(Typ.) |  |
|-------------------|---------------------------------------|-----------|----------------------------|-----------|----------------------------|-----------|-------------------------|-----------|-------------------------------|-----------|---------------------------------------|--|
|                   | *3 Parallel                           | *4 Series | *3 Parallel                | *4 Series | *3 Parallel                | *4 Series | *3 Parallel             | *4 Series | *3 Parallel                   | *4 Series | Single                                |  |
| PCA11/5ER-U01S002 | 193.0±30%                             | 6.9mH±30% | 0.11                       | 0.02      | 2.6                        | 0.44      | 44.4                    | 1607      | 42.8                          | 257       | 183                                   |  |
| PCA11/5ER-U02S002 | 85.8±30%                              | 3.1mH±30% | 0.17                       | 0.03      | 4.2                        | 0.70      | 18.4                    | 668       | 28.6                          | 171       | 155                                   |  |
| PCA11.5ER-U03S002 | 27.4±20%                              | 985±20%   | 1.76                       | 0.29      | 2.6                        | 0.44      | 44.4                    | 1607      | 42.8                          | 257       | 183                                   |  |
| PCA11/5ER-U04S002 | 12.2±20%                              | 438±20%   | 2.60                       | 0.43      | 4.2                        | 0.70      | 18.4                    | 668       | 28.6                          | 171       | 155                                   |  |
| PCA11/5ER-U05S002 | 14.7±20%                              | 529±20%   | 3.74                       | 0.62      | 2.6                        | 0.44      | 44.4                    | 1607      | 42.8                          | 257       | 183                                   |  |
| PCA11/5ER-U06S002 | 6.5±20%                               | 235±20%   | 5.26                       | 0.88      | 4.2                        | 0.70      | 18.4                    | 668       | 28.6                          | 171       | 155                                   |  |
| PCA11/5ER-U07S002 | 10.9±20%                              | 394±20%   | 5.19                       | 0.87      | 2.6                        | 0.44      | 44.4                    | 1607      | 42.8                          | 257       | 183                                   |  |
| PCA11/5ER-U08S002 | 4.9±20%                               | 175±20%   | 7.50                       | 1.25      | 4.2                        | 0.70      | 18.4                    | 668       | 28.6                          | 171       | 155                                   |  |
| PCA11/5ER-U09S002 | 8.5±20%                               | 306±20%   | 6.57                       | 1.10      | 2.6                        | 0.44      | 44.4                    | 1607      | 42.8                          | 257       | 183                                   |  |
| PCA11/5ER-U10S002 | 3.8±20%                               | 136±20%   | 9.24                       | 1.54      | 4.2                        | 0.70      | 18.4                    | 668       | 28.6                          | 171       | 155                                   |  |

### Electrical Specifications @ 23 degrees C

\*1 Idc 1 = Depend on inductance saturation. (-30% reduction from nominal L value).

\*2 Idc 2 = Depend on self temperature rise. (40 degC typ at specified Idc2).

\*3 Parallel 6 coils connected in parallel

\*4 Series 6 coils connected in series.

Hi - Pot between each individual coil to the others five 500 Vac, 2s, 2mA.

Operating Temperature -40 degC to +85 degC.

RoHS Compliant :

Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used except for exempted applications.



TDK USA Corporation / Component Engineering Laboratory

Copyright© 1997- 2006 TDK USA CORPORATION. All rights reserved.

rev. May 05'06