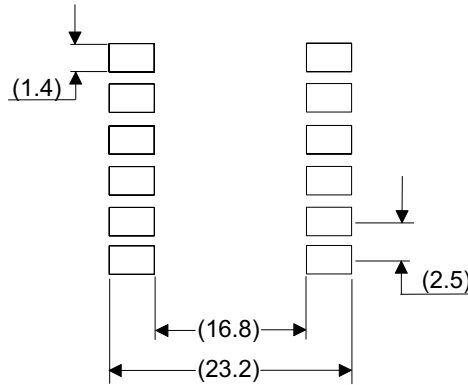
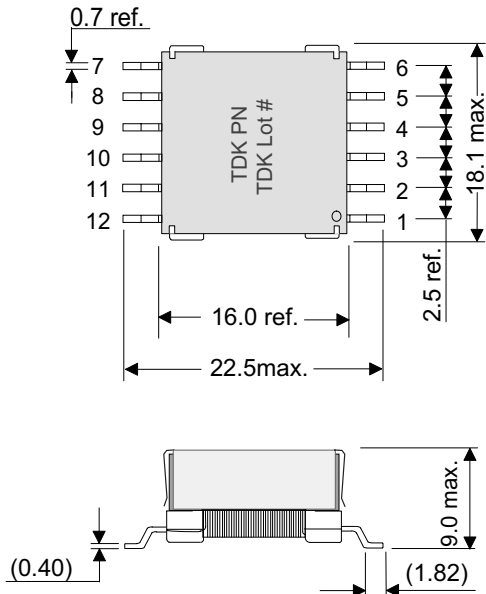


# TDK SMD MULTI WINDING TRANSFORMER

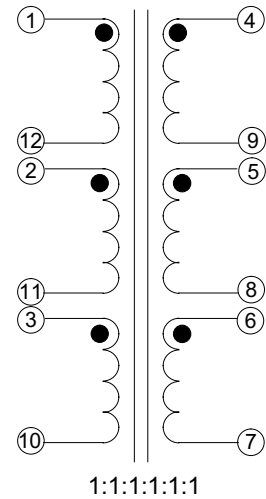
## PCA15EFD SERIES

### Mechanical



Suggested PCB Layout

### Schematic



| TDK Part Number  | Inductance<br>uH<br>@10KHz, 0.1Vrms |           | *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.)<br>Single |
|------------------|-------------------------------------|-----------|----------------------------|-----------|----------------------------|-----------|-------------------------|-----------|-------------------------------|-----------|-------------------------------------------------|
|                  | *3 Parallel                         | *4 Series | *3 Parallel                | *4 Series | *3 Parallel                | *4 Series | *3 Parallel             | *4 Series | *3 Parallel                   | *4 Series |                                                 |
| PCA15EFD-U01S003 | 169.0±30%                           | 6.1mH±30% | 0.1                        | 0.02      | 6.4                        | 1.07      | 12.9                    | 466       | 47.4                          | 284       | 117                                             |
| PCA15EFD-U02S002 | 81.0±30%                            | 2.9mH±30% | 0.2                        | 0.04      | 8.0                        | 1.34      | 8.9                     | 323       | 32.8                          | 197       | 98                                              |
| PCA15EFD-U03S003 | 23.3±20%                            | 840±20%   | 2.8                        | 0.46      | 6.4                        | 1.07      | 12.9                    | 466       | 47.4                          | 284       | 117                                             |
| PCA15EFD-U04S002 | 11.2±20%                            | 402±20%   | 3.8                        | 0.64      | 8.0                        | 1.34      | 8.9                     | 323       | 32.8                          | 197       | 98                                              |
| PCA15EFD-U05S003 | 14.2±20%                            | 511±20%   | 4.3                        | 0.72      | 6.4                        | 1.07      | 12.9                    | 466       | 47.4                          | 284       | 117                                             |
| PCA15EFD-U06S002 | 6.8±20%                             | 245±20%   | 7.1                        | 1.19      | 8.0                        | 1.34      | 8.9                     | 323       | 32.8                          | 197       | 98                                              |
| PCA15EFD-U07S003 | 9.3±20%                             | 335±20%   | 7.6                        | 1.27      | 6.4                        | 1.07      | 12.9                    | 466       | 47.4                          | 284       | 117                                             |
| PCA15EFD-U08S002 | 4.5±20%                             | 160±20%   | 11.3                       | 1.88      | 8.0                        | 1.34      | 8.9                     | 323       | 32.8                          | 197       | 98                                              |
| PCA15EFD-U09S003 | 7.9±20%                             | 286±20%   | 9.1                        | 1.51      | 6.4                        | 1.07      | 12.9                    | 466       | 47.4                          | 284       | 117                                             |
| PCA15EFD-U10S002 | 3.8±20%                             | 137±20%   | 13.4                       | 2.23      | 8.0                        | 1.34      | 8.9                     | 323       | 32.8                          | 197       | 98                                              |

### 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 other five 500 Vac, 60s, 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

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