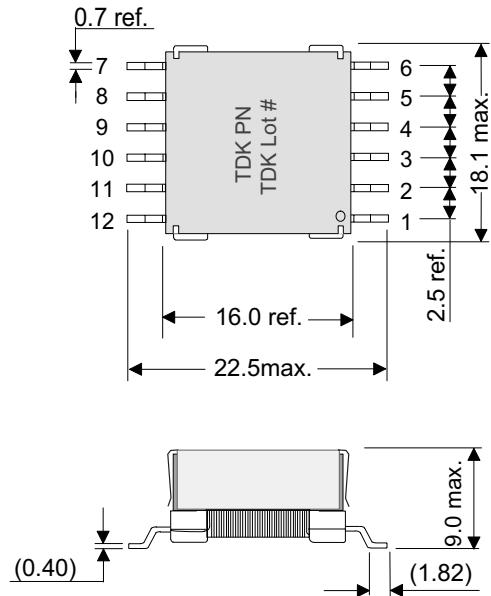
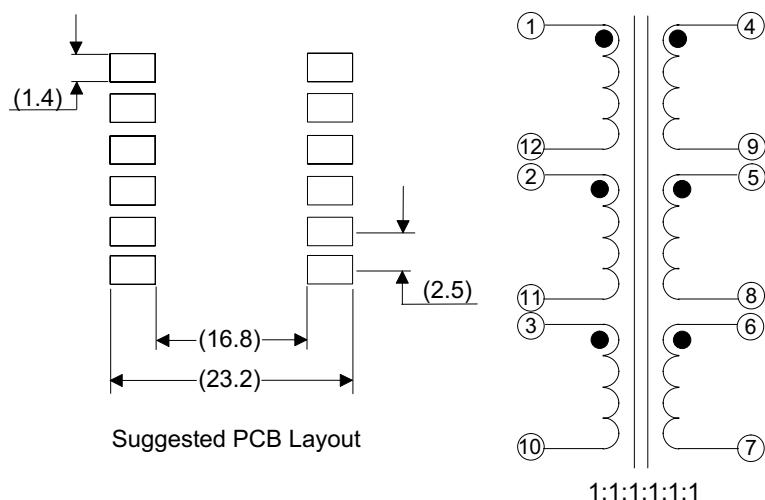


# TDK SMD MULTI WINDING TRANSFORMER PCA15EFD SERIES

**Mechanical**



**Schematic**



**Suggested PCB Layout**

| 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.) |  |
|------------------|-------------------------------------|-----------|-------------|----------------------------|-------------|----------------------------|-------------|-------------------------|-------------|-----------|-------------------------------|-----------|---------------------------------------|--|
|                  | *3 Parallel                         | *4 Series | *3 Parallel | *4 Series                  | *3 Parallel | *4 Series                  | *3 Parallel | *4 Series               | *3 Parallel | *4 Series | *3 Parallel                   | *4 Series | Single                                |  |
| 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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