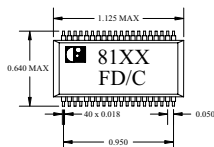


- Eight transformers in a SMD package supporting four transmit and four receive channels
- Units matched to leading dual and quad T1/E1/CEPT/SDN-PRI IC's

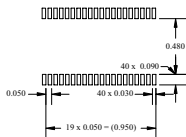


|           |                                      |              |      |                      |               |       |
|-----------|--------------------------------------|--------------|------|----------------------|---------------|-------|
| Crystal   | 61574                                | T1 & PCM-30  | 8160 | LXT332               | E1            | 8159  |
|           | 61535A, 61574A, 61575, 6158A         | T1           | 8155 | LXT332               | E1            | 8160  |
|           | 61535A, 61574A, 61575, 6158A         | E1           | 8160 | LXT334               | QUAD E1       | 8158  |
|           | 61583                                | T1E1(3,3V)   | 8152 | LXT335               | QUAD T1       | 8157  |
| Dallas    | 61583                                | T1E1(5,0V)   | 8153 | LXT335               | QUAD E1       | 8158  |
|           | 61584, 61584A                        | IQ3          | 8160 | LXT360/361/370       | T1E1          | 8157  |
|           | DS2186, DS2187                       |              | 8156 | Lucent Technologies  | CEPT          | 8158  |
|           | DS2151, DS2152, DS2153, DS2154       | T1,E1        | 8158 | DS1                  | T1 & CEPT     | 8158  |
|           | DS21Q352, DS21Q354                   | 3V QUAD      | 8157 | T7290                | QUAD E1       | 8162  |
|           | DS21Q352, DS21Q354                   | 5V QUAD      | 8160 | T7688                | QUAD T1       | 8161  |
|           | TS650, TS620, TS675, TS681, TS683    |              | 8160 | T7689                | DS1           | 8161  |
|           | 56L22, 56L65, C240, C280, C282, C277 |              | 8160 | T7690                | CEPT          | 8162  |
|           | TS793, TS794                         | QUAD E1      | 8154 | T7690                | CEPT          | 8162  |
|           | TS684                                | T1           | 8158 | PMC-Sierra           | PM341, PM6341 | 8158  |
| Level One | T7288                                | CEPT         | 8156 | PM3414               |               | 8158  |
|           | LXT300/301/305                       |              | 8160 | PM4351-RI            | T1            | 8163  |
|           | LXT304A/305A                         | T1           | 8155 | Rockwell             | BT8370        | T1,E1 |
|           | LXT304A/305A                         | PCM-3075/120 | 8154 | R8069, R806A, R8069B |               | 8157  |
|           | LXT310/311                           |              | 8157 | PEB254               |               | 8156  |
|           | LXT317/318                           | T1E1         | 8160 | Siemens              | PER2254       | 8150  |
|           | LXT317/318                           | T1E1         | 8159 | VLSI                 | VP14Q574      | T1    |
|           | LXT317/318                           | T1E1         | 8157 |                      | VP14Q574      | E1    |
|           | LXT331                               | E1           | 8157 |                      | VP14Q575      | T1    |
|           |                                      |              |      |                      | VP14Q575      | E175  |

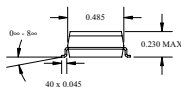
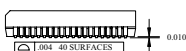
## MECHANICAL AND SCHEMATIC (All dimensions in inches)



## SUGGESTED PAD LAYOUT



SEE PAGE TWO FOR SCHEMATICS

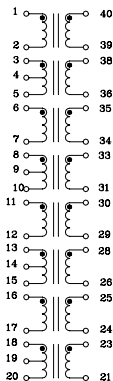


UNLESS OTHERWISE SPECIFIED, ALL TOLERANCES ARE ± .010

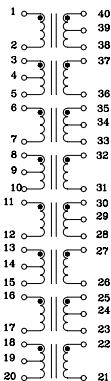
## ELECTRICAL SPECIFICATION @ 25°C

| Part Number | Turns Ratio (Pri:Sec ±2%) |          | OCL @ 25 °C (mH MIN) |     |     |     | LI (µH MAX) |    |    |    | C <sub>ww</sub> pF (MAX)   | Schematic                  | Primary Pins |    |
|-------------|---------------------------|----------|----------------------|-----|-----|-----|-------------|----|----|----|----------------------------|----------------------------|--------------|----|
|             | TX                        | RX       | TX                   | RX  | TX  | RX  | TX          | RX | TX | RX |                            |                            | TX           | RX |
| 8150        | 1:2.4                     | 1:1      | 1.0                  | 1.0 | 0.5 | 0.5 | 35          | 35 | F  |    | 1-2, 8-9, 11-12, 19-19     | 24-25, 27-28, 34-35, 37-38 |              |    |
| 8151        | 1:2CT                     | 1CT:2    | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | C  |    | 4-5, 9-10, 14-15, 19-20    | 1-3, 6-8, 11-13, 18-18     |              |    |
| 8152        | 1:2                       | 1:2      | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | E  |    | 1-3, 6-8, 11-13, 18-18     | 4-5, 9-10, 14-15, 19-20    |              |    |
| 8153        | 1:1.15                    | 1:1.15   | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | E  |    | 1-3, 6-8, 11-13, 18-18     | 4-5, 9-10, 14-15, 19-20    |              |    |
| 8154        | 1:1/1.26                  | 1:2CT    | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | B  |    | 1-2, 6-7, 11-12, 18-17     | 21-22, 26-27, 31-32, 36-37 |              |    |
| 8155        | 1:1.15                    | 1:2CT    | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | A  |    | 1-2, 6-7, 11-12, 18-17     | 21-23, 26-28, 31-33, 36-38 |              |    |
| 8156        | TCT:1.41                  | TCT:1.41 | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | C  |    | 1-3, 6-8, 11-13, 18-18     | 21-23, 26-28, 31-33, 36-38 |              |    |
| 8157        | 1:2CT                     | 1:1CT    | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | B  |    | 1-2, 6-7, 11-12, 18-17     | 21-22, 26-27, 31-32, 36-37 |              |    |
| 8158        | 1:1.38CT                  | 1:2CT    | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | C  |    | 24-25, 29-30, 34-35, 39-40 | 4-5, 9-10, 14-15, 19-20    |              |    |
| 8159        | 1:2                       | 1:2CT    | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | D  |    | 1-2, 9-10, 11-12, 19-20    | 23-25, 28-28, 33-35, 36-38 |              |    |
| 8160        | 1:2CT                     | 1:2CT    | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | C  |    | 4-5, 9-10, 14-15, 19-20    | 24-25, 29-30, 34-35, 39-40 |              |    |
| 8161        | 1:1.14                    | 1:1.14CT | 1.2                  | 1.2 | 0.6 | 0.6 | 35          | 35 | A  |    | 1-2, 6-7, 11-12, 18-17     | 38-36, 33-31, 28-26, 23-21 |              |    |
| 8162        | 1:1.36                    | 1:1.36CT | 1.2                  | 1.2 | 0.4 | 0.5 | 20          | 20 | A  |    | 1-2, 6-7, 11-12, 18-17     | 38-36, 33-31, 28-26, 23-21 |              |    |
| 8163        | 1:2.4                     | 1:1CT    | 1.0                  | 1.0 | 0.5 | 0.5 | 35          | 35 | G  |    | 1-2, 8-10, 11-12, 19-20    | 38-37, 35-34, 28-27, 25-24 |              |    |

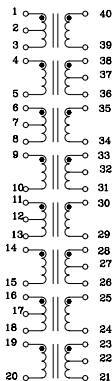
SCHEMATIC A



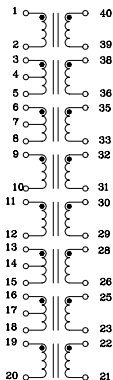
SCHEMATIC B



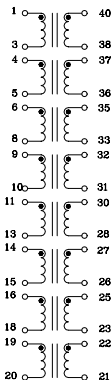
SCHEMATIC C



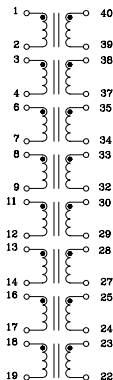
SCHEMATIC D



SCHEMATIC E



SCHEMATIC F



SCHEMATIC G

