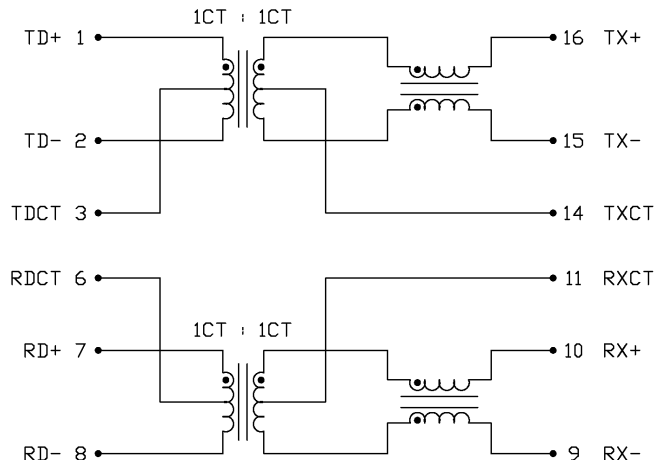


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# SCHEMATIC



## ELECTRICAL CHARACTERISTICS @ 25°C

|                                                                                                                                                                            |                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <p> <b>URNS RATIO</b><br/> Tx (16&amp;14&amp;15) : (1&amp;3&amp;2)<br/> Rx (7&amp;6&amp;8) : (10&amp;11&amp;9) </p>                                                        | <p> 1CT : 1CT<br/> 1CT : 1CT </p>                          |
| <p> <b>PHASING</b><br/> OCL (-40°C - +85°C)<br/> WITH 8mA DC BIAS &amp; 100mVrms @ 100kHz<br/> Rx (10&amp;9) OPEN 7&amp;8<br/> Tx (16&amp;15) OPEN 1&amp;2 </p>            | <p> 16 TO 1 ; 15 TO 2<br/> 10 TO 7 ; 9 TO 8 </p>           |
| <p> <b>LEAKAGE INDUCTANCE, Le (-40°C - +85°C)</b><br/> MEASURED WIHT 100mVrms @ 1MHz<br/> Rx (10&amp;9) WITH 7&amp;8 SHORTED<br/> Tx (16&amp;15) WITH 1&amp;2 SHORTED </p> | <p> 350μH MIN.<br/> 350μH MIN. </p>                        |
| <p> <b>INTERWINDING CAPACITANCE, Cw/w</b><br/> Rx (7&amp;8 TO 10&amp;9)<br/> Tx (1&amp;2 TO 16&amp;15) </p>                                                                | <p> 25pF MAX.<br/> 25pF MAX. </p>                          |
| <p> <b>DCR WINDING RESISTANCE</b><br/> (1-2) ; (7-8) </p>                                                                                                                  | <p> 1.0Ω MAX. </p>                                         |
| <p> <b>INSERTION LOSS</b><br/> @ 100kHz TO 80MHz </p>                                                                                                                      | <p> 1.0dB MAX. </p>                                        |
| <p> <b>RETURN LOSS (UNDER 100Ω ±15% ENVIRONMENT)</b><br/> @ 0.5 TO 30 MHz<br/> @ 30 TO 60 MHz<br/> @ 60 TO 80 MHz </p>                                                     | <p> 16dB MIN.<br/> 16-20 LOG (f/30MHz)<br/> 10dB MIN. </p> |
| <p> <b>COMMON MODE TO COMMON MODE ATTENUATION</b><br/> @ 0.1 TO 80 MHz<br/> @ 80 TO 125 MHz<br/> @ 125 TO 250 MHz </p>                                                     | <p> 38dB MIN.<br/> 30dB MIN.<br/> 10dB MIN. </p>           |
| <p> <b>CROSSSTALK</b><br/> @ 0.1 TO 80 MHz<br/> @ 80 TO 125 MHz<br/> @ 125 TO 250 MHz </p>                                                                                 | <p> 38dB MIN.<br/> 30dB MIN.<br/> 10dB MIN. </p>           |
| <p> <b>COMMON MODE TO DIFFERENTIAL MODE ATTENUATION</b><br/> @ 0.1 TO 80 MHz<br/> @ 80 TO 125 MHz<br/> @ 125 TO 250 MHz </p>                                               | <p> 38dB MIN.<br/> 30dB MIN.<br/> 10dB MIN. </p>           |
| <p> <b>HIPOT</b> </p>                                                                                                                                                      | <p> PER HAND-WORK-03 </p>                                  |

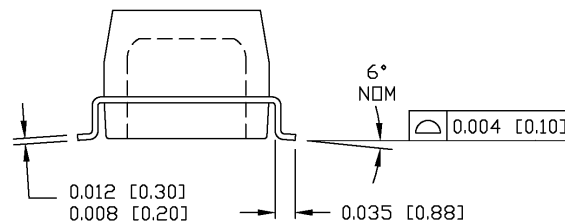
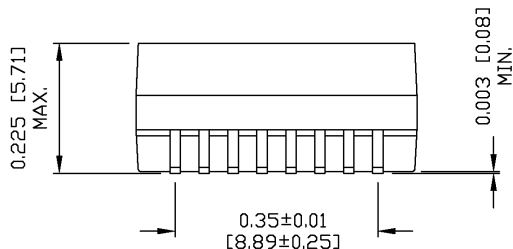
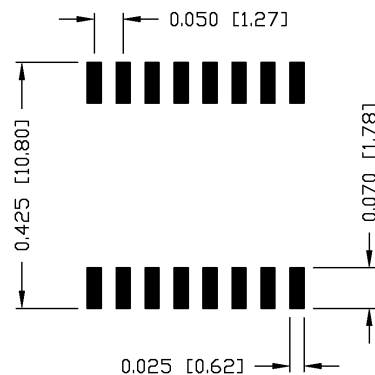
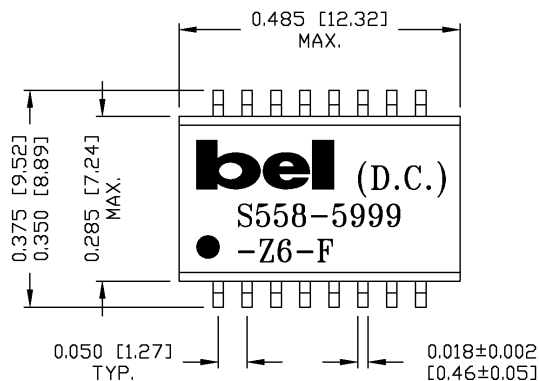
| ORIGINATED BY | DATE     | TITLE                                 | PART NO. / DRAWING NO. | STANDARD DIM. | [ ] METRIC DIM. AS REFERENCE |           |
|---------------|----------|---------------------------------------|------------------------|---------------|------------------------------|-----------|
| HQ            | 01-18-06 | 10/100BASE-T MODULE<br>S558-5999-Z6-F | X5585999Z6-F           | TOL. IN INCH  | UNIT : INCH [mm]             | REV. : A  |
| DRAWN BY      | DATE     |                                       | FILE NAME              | .X            | SCALE : N/A                  | SIZE : A4 |
| DQ Chen       | 01-18-06 |                                       | X5585999Z6FA.DWG       | .XX ±0.01     |                              | PAGE : 2  |
|               |          |                                       |                        | .XXX ±0.005   |                              |           |



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# SUGGESTED PCB PAD LAYOUT



## NOTES:

1. STANDARD MARKING REFER TO DOC. HAND-WORK-04.
2. PACKAGE CODE: "QBS001".

| ORIGINATED BY | DATE     | TITLE              | PART NO. / DRAWING NO. | STANDARD DIM. TOL. IN INCH | [ ] METRIC DIM. AS REFERENCE |           |
|---------------|----------|--------------------|------------------------|----------------------------|------------------------------|-----------|
| HQ            | 01-18-06 | MECHANICAL DRAWING | X5585999Z6-F           | .X                         | UNIT : INCH [mm]             | REV. : A  |
| DRAWN BY      | DATE     |                    | FILE NAME              | .XX ±0.01                  | SCALE : N/A                  | SIZE : A4 |
| DQ Chen       | 01-18-06 | S558-5999-Z6-F     | X5585999Z6FA.DWG       | .XXX ±0.005                | ⊕                            | PAGE : 3  |

