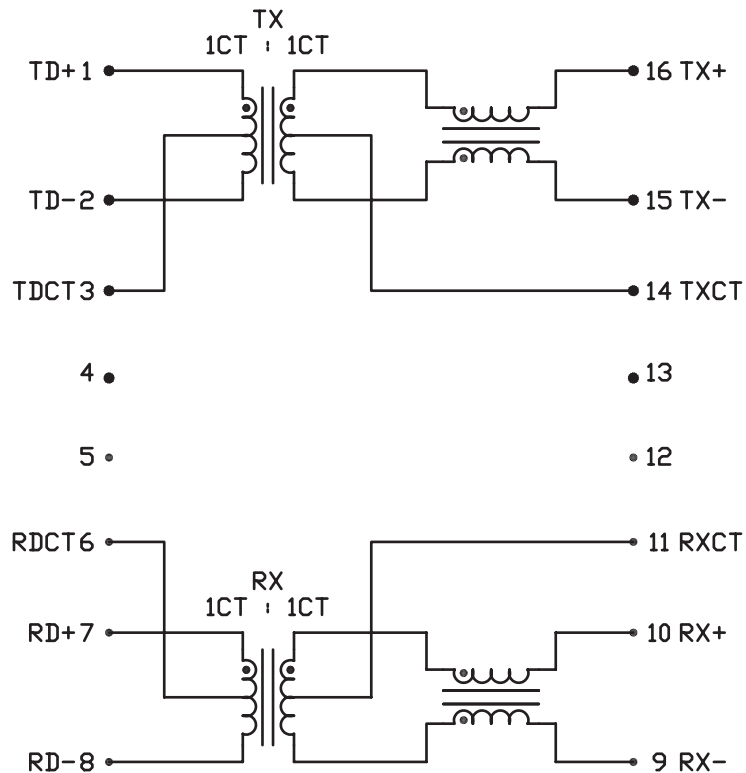


10/100BASE-T LAN MAGNETICS

S558-5999-W2-F Transformer Module for Auto MDIX



SCHEMATIC



ELECTRICAL CHARACTERISTICS @ 25°C

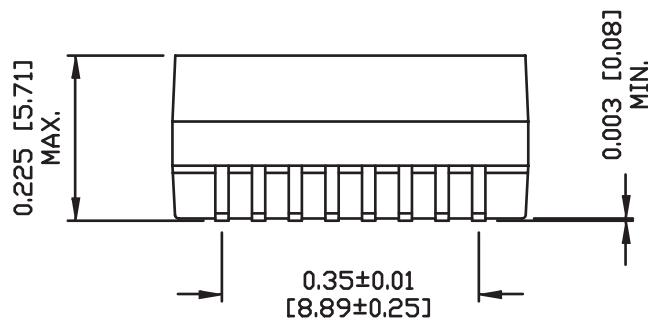
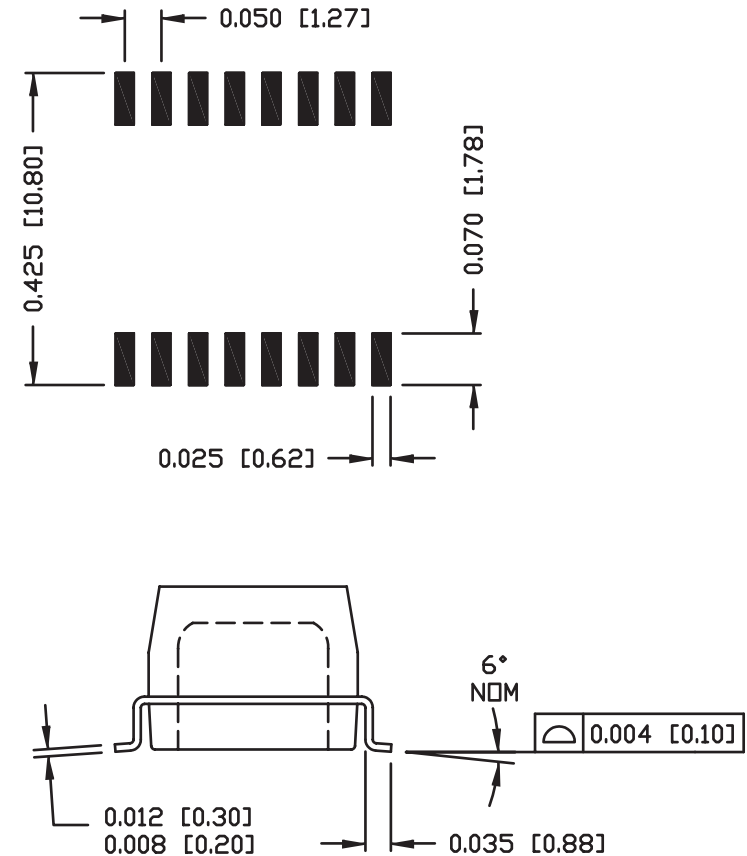
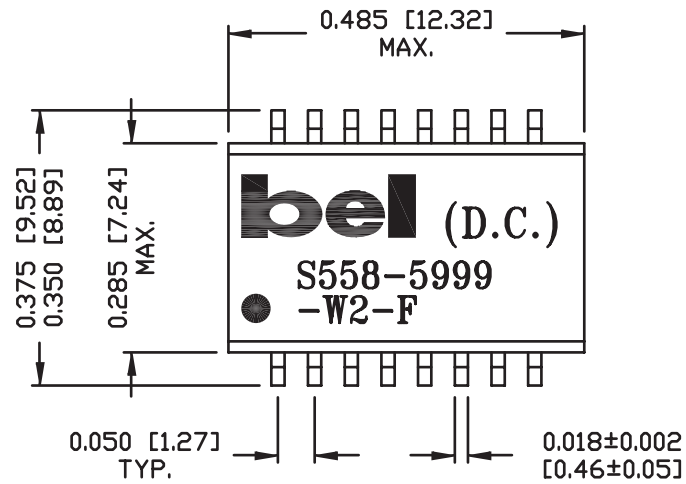
<p>URNS RATIO Tx (1-3-2) : (16-14-15) Rx (7-6-8) : (10-11-9)</p>	<p>1CT : 1CT 1CT : 1CT</p>
<p>PHASING</p>	<p>PER DOT CONVENTION</p>
<p>DCL (0°C - 70°C) Tx PIN 1-2 Rx PIN 7-8</p>	<p>350μH MIN. @100kHz, 100mV w/8mA DC BIAS</p>
<p>LEAKAGE INDUCTANCE, Le (0°C - 70°C) Tx PIN 1-2 (w/ 16-15 SHORTED) Rx PIN 7-8 (w/ 10-9 SHORTED)</p>	<p>0.4μH MAX. @1MHz, 20mV</p>
<p>INTERWINDING CAPACITANCE, Cw/w Tx (1-2 TO 16-15) Rx (7-8 TO 10-9)</p>	<p>25pF MAX. @1MHz, 20mV</p>
<p>WINDING RESISTANCE, DCR (1-2) ; (7-8)</p>	<p>1.3Ω MAX.</p>
<p>INSERTION LOSS @ 100kHz TO 80MHz</p>	<p>1.0dB MAX.</p>
<p>RETURN LOSS (UNDER 100Ω ±15% ENVIRONMENT) @ 0.5 TO 30 MHz @ 30 TO 60 MHz @ 60 TO 80 MHz</p>	<p>16dB MIN. 16-20LOG(f/30MHz) dB MIN. 10dB MIN.</p>
<p>COMMON TO COMMON MODE ATTENUATION @ 0.1 TO 80 MHz @ 80 TO 125 MHz @ 125 TO 250 MHz</p>	<p>38dB MIN. 30dB MIN. 10dB MIN.</p>
<p>CROSSTALK @ 0.1 TO 80 MHz @ 80 TO 125 MHz @ 125 TO 250 MHz</p>	<p>38dB MIN. 30dB MIN. 10dB MIN.</p>
<p>COMMON TO DIFFERENTIAL MODE ATTENUATION @ 0.1 TO 80 MHz @ 80 TO 125 MHz @ 125 TO 250 MHz</p>	<p>38dB MIN. 30dB MIN. 10dB MIN.</p>
<p>HIPOT</p>	<p>PER HAND-WORK-03</p>

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SUGGESTED PCB PAD LAYOUT



NOTES:

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