

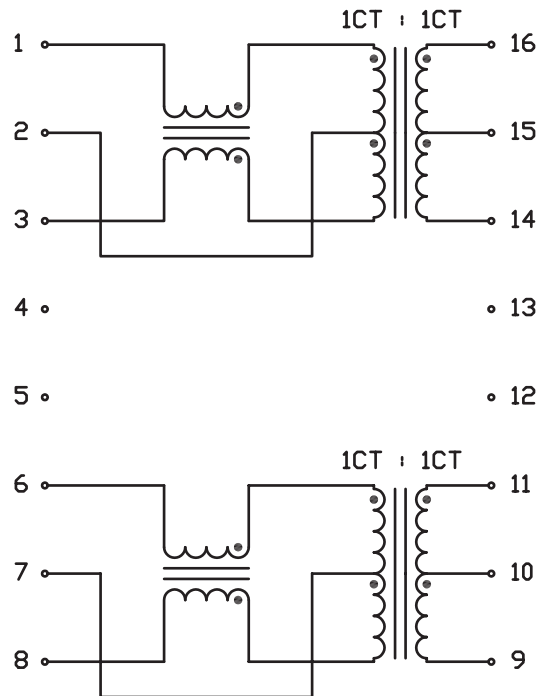
10/100BASE-T LAN MAGNETICS

S558-5999-T5-F Extended Temperature Transformer Module



ELECTRICAL CHARACTERISTICS @25°C

SCHEMATIC



Operating temperature -40° to +85° C

URNS RATIO
 Tx (1&2&3) : (16&15&14)
 Rx (6&7&8) : (11&10&9)

PHASING

DC (-40°C - 85°C)
 @ 100kHz, 100mV W/8mA DC BIAS
 TX (16&14) OPEN 1&3
 RX (11&9) OPEN 6&8

LEAKAGE INDUCTANCE, L_e (0°C - 70°C)
 MEASURED WITH 20mVrms @ 1MHz
 TX (16&14) with 1&2&3 SHORTED
 RX (11&9) with 6&7&8 SHORTED

INTERWINDING CAPACITANCE, C_w/w
 TX (1&3 to 16&14)
 RX (6&8 to 11&9)

DCR WINDING RESISTANCE
 (1-3) ; (6-8)
 (16-14) ; (11-9)

INSERTION LOSS
 @ 100kHz TO 100MHz

RETURN LOSS (UNDER 100 OHMS ±15% ENVIRONMENT)
 @ 100kHz TO 30MHz
 @ 30 TO 60MHz
 @ 60 TO 80MHz

COMMON TO COMMON MODE ATTENUATION
 @ 0.1 TO 100MHz

CROSSTALK
 @ 1MHz
 @ 30MHz
 @ 60MHz
 @ 100MHz

COMMON TO DIFFERENTIAL MODE ATTENUATION
 @ 0.1 TO 100MHz

HIPOT

1CT : 1CT
 1CT : 1CT
 16 TO 1 ; 14 TO 3
 11 TO 6 ; 9 TO 8

350uH MIN.
 350uH MIN.

0.35uH MAX.
 0.35uH MAX.

30pF MAX.
 30pF MAX.

2.0 OHM MAX.
 1.0 OHM MAX.

1.0dB MAX.

18dB MIN.
 18-20 LOG (F/30MHz) MIN.
 12dB MIN.

30dB MIN.

65dB MIN.
 55dB MIN.
 45dB MIN.
 35dB MIN.

40dB MIN.

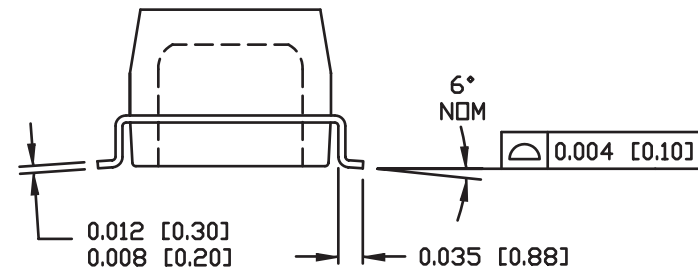
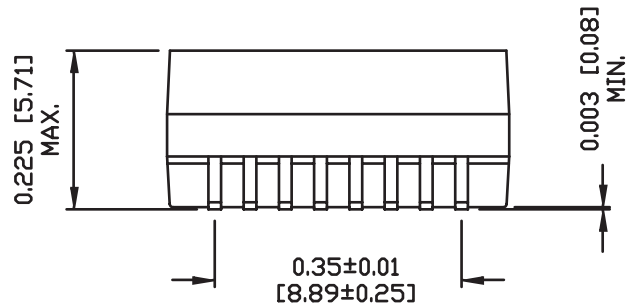
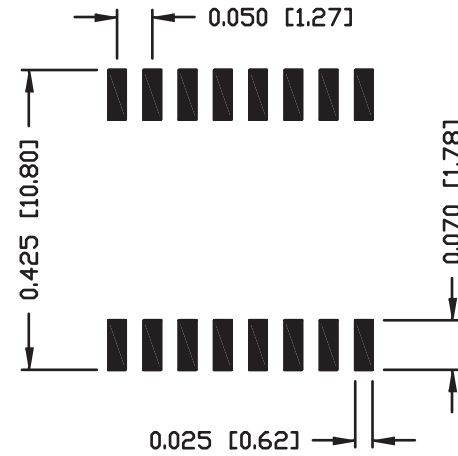
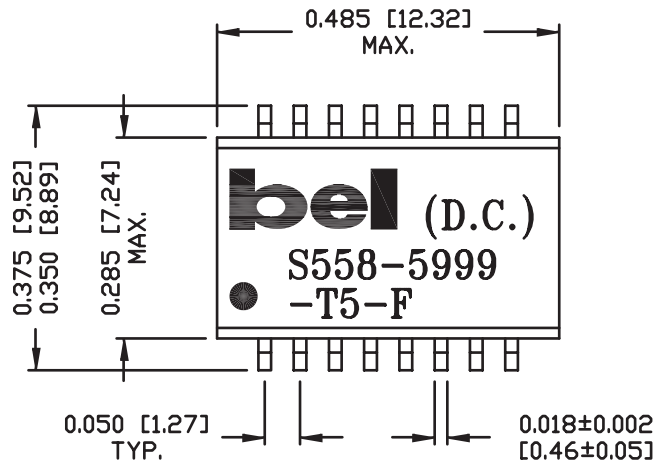
PER HAND-WORK-03

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SUGGESTED PCB PAD LAYOUT



NOTES:

- STANDARD MARKING REFER TO DDC. HAND-WORK-04.
- PACKAGE CODE: 'QBS001'.