

VOICE OVER IP MAGNETICS

Broadband Transformers

LM00200

- Support 10 Mbps and 100 Mbps VoIP applications
- Compliant with IEEE 802.3 standards
- Designed to meet 350mA balanced DC line current
- 350µH OCL with 8mA bias applied from 0° to 70° C
- Minimum interwinding breakdown voltage of 1500 Vrms

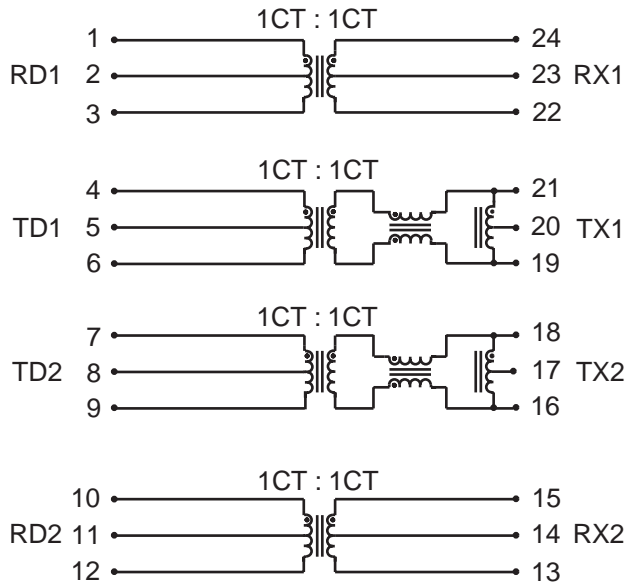
ELECTRICAL SPECIFICATIONS AT 25° C

| Part Number | Turns Ratio ±3% | | Primary Inductance µH min | Leakage Inductance µH max | Interwinding Capacitance pF max | DCR Ω max | | | |
|--------------|--------------------|------------|------------------------------|------------------------------|------------------------------------|--------------|-----|------|-----|
| | TXIN : TXO | RXIN : RXO | | | | TXIN | TXO | RXIN | RXO |
| S558-5500-02 | 1CT : 1CT | 1CT : 1CT | 350 | 0.25 | 25 | 1.0 | 1.0 | 1.0 | 1.0 |
| S558-5500-04 | 1CT : 1CT | 1CT : 1CT | 350 | 0.25 | 25 | 1.0 | 1.0 | 1.0 | 1.0 |
| S558-5500-12 | 1CT : 1CT | 1CT : 1CT | 350 | 0.25 | 25 | 1.0 | 1.0 | 1.0 | 1.0 |
| S558-5500-16 | 1CT : 1CT | 1CT : 1CT | 350 | 0.25 | 40 | 1.0 | 1.4 | 1.0 | 1.4 |

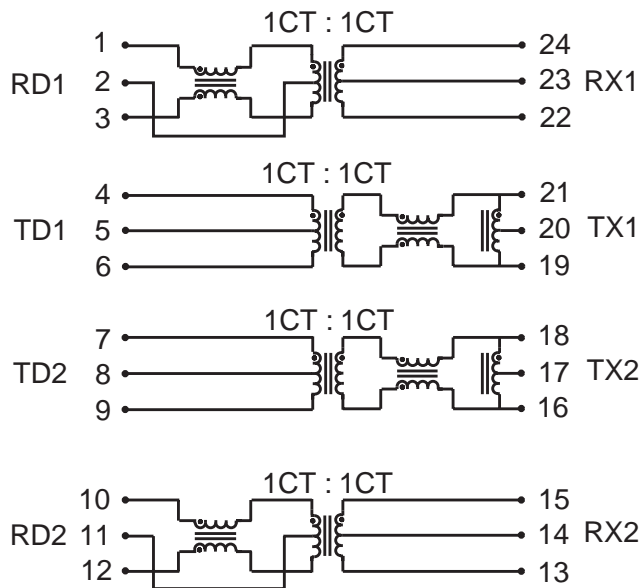
| Part Number | Insertion Loss dB min | Return Loss dB min | | | Crosstalk dB min | | | | Common to Differential Mode Rejection dB min | Common to Common Mode Rejection dB min |
|--------------|--------------------------|-----------------------|---------------|----------------|---------------------|-------|-------|--------|--|--|
| | | 100kHz to 100MHz | 2MHz to 30MHz | 60MHz to 80MHz | 1MHz | 30MHz | 60MHz | 100MHz | | |
| S558-5500-02 | -1.5 | -16 | -10 | -65 | -60 | -50 | -45 | -45 | -45 | |
| S558-5500-04 | -1.5 | -16 | -10 | -65 | -60 | -50 | -45 | -45 | -45 | |
| S558-5500-12 | -1.5 | -16 | -10 | -65 | -60 | -50 | -45 | -45 | -45 | |
| S558-5500-16 | -1.5 | -16 | -10 | -65 | -60 | -50 | -45 | -45 | -45 | |

SCHEMATIC

S558-5500-02 S558-5500-04



S558-5500-12



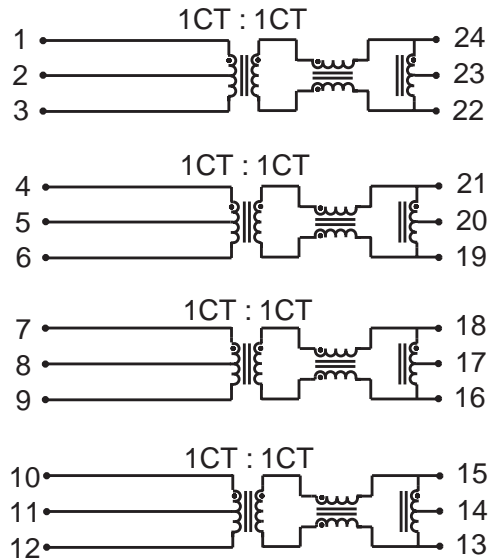
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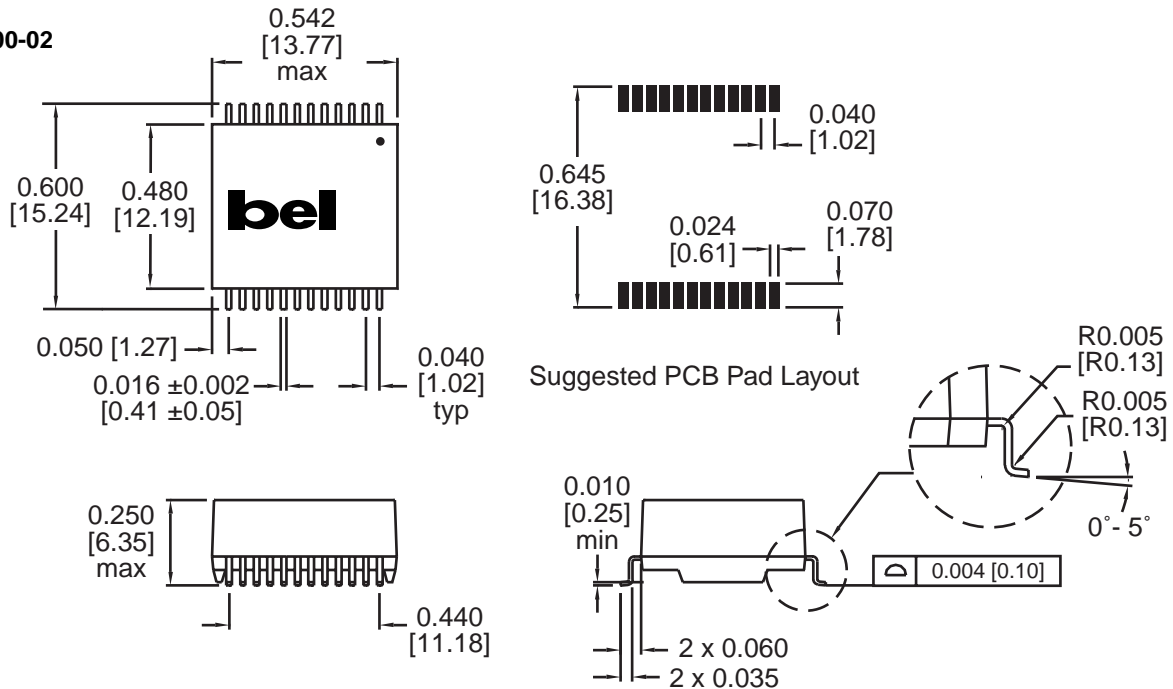
SCHEMATIC

S558-5500-16



MECHANICAL

S558-5500-02



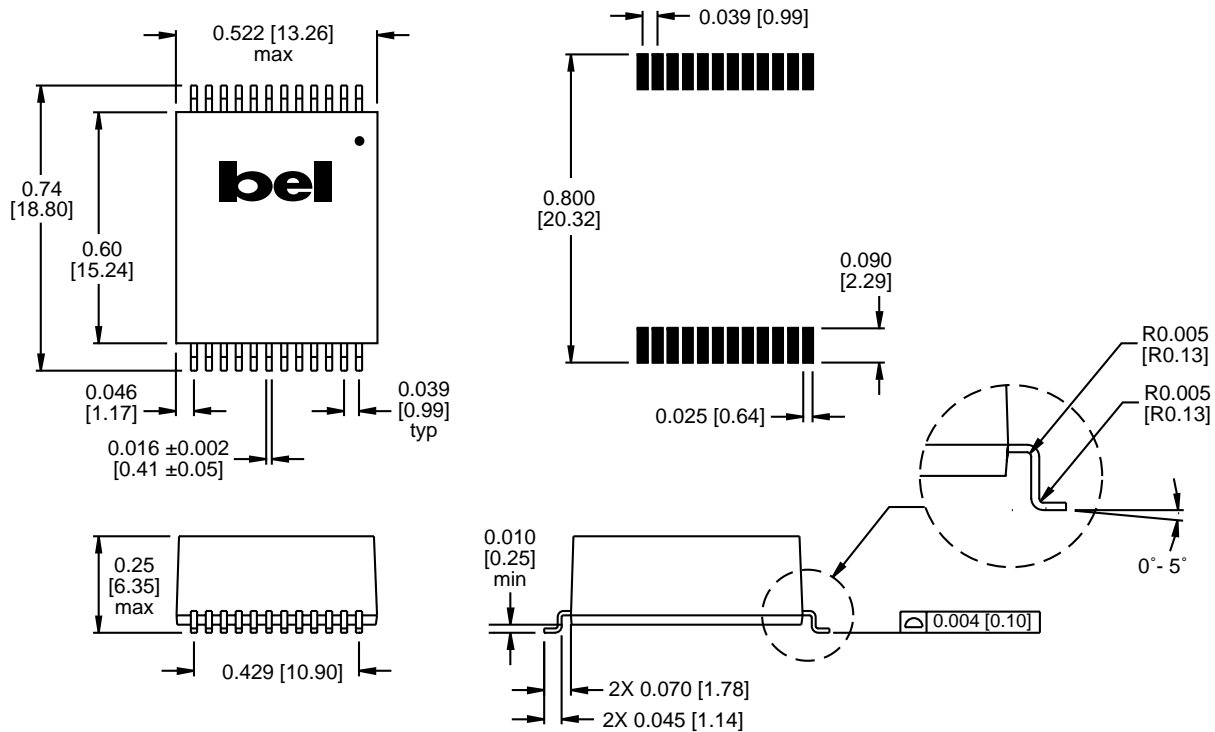
Dimensions are in inches [millimeters].
Standard dimension tolerance is ± 0.005 [0.13] unless otherwise noted.

LM00200

MECHANICAL

S558-5500-04
S558-5500-12
S558-5500-16

Suggested PCB Pad Layout



Dimensions are in inches [millimeters].
Standard dimension tolerance is ± 0.005 [0.13] unless otherwise noted.

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