SCIENTIFIC CONVERSION, INC.

SuperShielded tm Digital Audio Transformer SC947-02LF Ultimate Performance 1:1 ratio AES/EBU 110 Ω and AES 3id 75 Ω

Our latest part for Broadcast and Pro Audio applications offers the best performance ever in a 1:1 ratio transformer with optimal bandwidth and low pulse aberration to cover the sampling rate range from 32 kHz to 192 kHz for all digital audio interfaces AES/EBU 110 , SP/DIF or AES 3id 75 . SC047-02LF incorporates a special interwinding shield to reduce interwinding capacitance to 0.5 pF and to further increase high frequency common mode noise rejection. It outperforms all other Digital Audio transformers by 22..38 dB.

Over 5 years of R&D at Scientific Conversion optimized this advanced transformer specifically for Digital Audio applications; i.e. Broadcast equipment, cinema production and studio and mastering converters, low jitter receivers, high-end consumer, satellite uplinks, etc. SC947-02LFLF provides a 1:1 ratio for interfacing transmitters and receivers in either 110 or 75 environments. Extremely wide bandwidth, low aberration, lowest capacitance and low leakage inductance characterize this unique device. Since 2005, SC947-02LF has achieved wide application in the Broadcast, Pro Audio and High End Audio market.

SC947-02LF is packaged in a low profile SMD pattern 6.3 mm x 9.5 mm x 8.2 mm. The PCB footprint is 9.5 mm x 11 mm. The SC947-02LFLF is designed for use with all RS-485/RS-422 and digital audio transmitters, receivers, transceivers.

Specifications include an astounding 3 nS rise-time! Bandwidth extends from 15 kHz to 125 MHz. This new shielded part has a "Super" low capacitance of 0.5 pF, which reduces radiated and received noise and provides decreased jitter and better audio quality in high interference environments. The low capacitance provides increased reduction of emitted high frequency common mode noise, which improves your product's EMI and transient susceptibility compliance (IEC/CISPR/FCC). At 10 MHz, the SC947-02LF common-mode rejection ratio is 50 dB!

For optimum shielding, please use these connections: pins 1, 4 towards connector pins 5, 8 towards IC, (TX or RX), both pin 6 AND pin 7 to ground plane of IC nearest the return pin.

Our exclusive products are designed by digital audio and magnetics experts, and are handmade in our factory in the USA. For further technical information, engineering application or sales information, please contact Scientific Conversion directly.

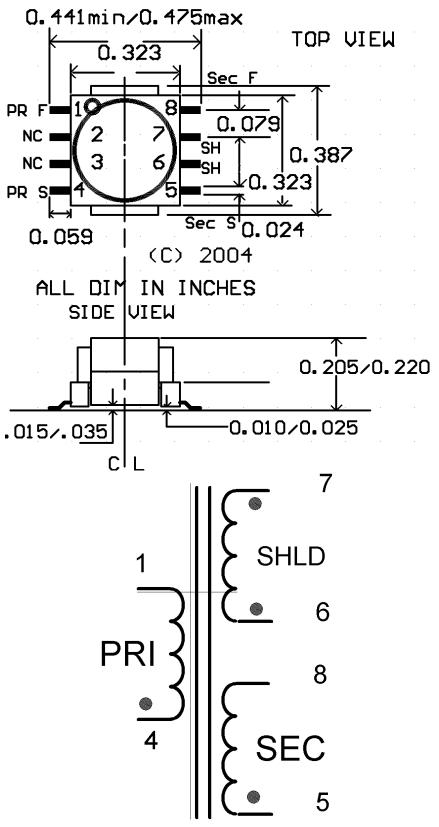
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SC947-02LF SuperShielded™ 1:1 ratio Digital Audio Surface Mount Transformer SPECIFICATIONS

RATIO	1:1
INDUCTANCE, PRIMARY	350 uH typ
INDUCTANCE, SECONDARY	350 uH typ
INDUCTANCE, LEAKAGE	450 nH typ
INTERWINDING CAPACITANCE SHIELD FLOATING	3 pF typ
INTERWINDING CAPACITANCE SHIELD GROUNDED	0.5 pF typ
E-T PRODUCT	25 V-uS typ
RESISTANCE PRI / SEC	0.45 / 0.50 Ω typ
BANDWIDTH (3dB) IN 110 Ω Environment	15 KHz - 125 MHz typ
VOLTAGE ISOLATION P-S	500 VDC
RISETIME (110 Ω)	3 nS typ
PHYSICAL DIMENSIONS	
HEIGHT	6.3 mm max
WIDTH	9.5 mm max
BODY LENGTH	8.2 mm max
PCB FOOTPRINT	11.2 mm max

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SC947-02[™]



Phone: +1 415 892 2323 skype jondpaul www.scientificonversion.com E-MAIL: inquiry@scientificonversion.com