DA100 Series
Transformers for Digital Audio Data Transmission

FEATURES

- RoHS compliant
- Compatible with leading chip sets
- 2kVrms isolation
- Industry-standard pinout
- Surface mount option
- UL 94 V-0 package materials
- Low profile
- Suitable for both 75 & 110Ω circuits
- Toroidal construction
- Compliant with AES/EBU standards
- Fully encapsulated

DESCRIPTION

The Digital Audio Range of transformers is designed to improve the balance of transmitter and receiver circuitry in hi-fi equipment, video games and other applications requiring high-performance digital audio transmission. Compliant with AES/EBU standards for the digital audio interface, offering optimised shunt capacitance between primary and secondary windings. Capable of operating over the audio data rate frequency range, providing isolation from 50-60Hz noise.

Surface-mount parts

The surface-mount (M suffix) products are not recommended for new designs. For existing designs, however, Murata Power Solutions will continue to manufacture and fully support these parts. For recommended alternatives please refer to the DA100J Series datasheet.

TECHNICAL NOTES

Repeate high-voltage isolation testing

It is well known that repeated high-voltage isolation testing of a barrier component can actually degrade isolation capability, to a lesser or greater degree depending on materials, construction and environment. This series has toroidal isolation transformers, with no additional insulation between primary and secondary windings of enameled wire. While parts can be expected to withstand several times the stated test voltage, the isolation capability does depend on the wire insulation. Any material, including this enamel (typically polyurethane) is susceptible to eventual chemical degradation when subject to very high applied voltages thus implying that the number of tests should be strictly limited. We therefore strongly advise against repeated high voltage isolation testing, but if it is absolutely required, that the voltage be reduced by 20% from specified test voltage. All specifications typical at $T_a = 25°C$

www.murata-ps.com/support
PACKAGE SPECIFICATIONS

MECHANICAL DIMENSIONS

<table>
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<th>6 Pin DIL</th>
<th>6 Pin SM</th>
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<td>Top View</td>
<td>Top View</td>
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RECOMMENDED FOOTPRINT DETAILS

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SOLDERING INFORMATION

- Pin finish: Matte tin
- Peak wave solder temperature: 300°C for 10 seconds
- Peak reflow temperature: 220°C

1 For further information, please visit www.murata-ps.com/rohs
2 For high temperature reflow parts see DA100J series datasheet.

TUBE OUTLINE DIMENSIONS

Unless otherwise stated all dimensions in inches (mm) ±0.01 (0.25). All pins on a 0.1 (2.54) pitch and within ±0.01 (0.25) of true position.

Package Weight 0.93g Typ.

Tube length: 18.3×±0.08 (465±2).
Tube material: Antistatic coated clear pvc.

www.murata-ps.com/support
TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS

Unless otherwise stated all dimensions in inches (mm) ±0.01(0.25).
*Includes flange distortion at outer edge.
+Measured at hub.

TAPE OUTLINE DIMENSIONS

Unless otherwise stated all dimensions in inches (mm) ±0.01(0.25).