

# Dual Ratio MIL-STD-1553 Data Bus Interface Surface Mount Transformers



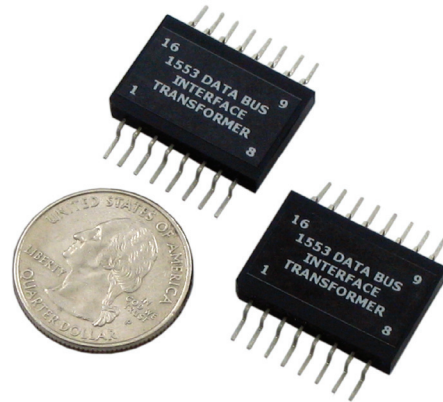
## Data Sheet

The North Hills DX155345-DGL Dual Ratio Data Bus Interface Surface Mount Transformer has been designed specifically for MIL-STD-1553 users desiring an extra margin of Common Mode Rejection at lower cost.

This new Data Bus Interface Transformer contains a dual ratio in a single package. With dimensions of 0.63" x 0.93" x 0.155", and weighing less than 4 grams, it was designed for programs that are weight sensitive and have limited space and volume for installation.

These transformers are tested to meet the requirements of MIL-STD-1553A, MIL-STD-1553B, MDC A-3818, -5690, -5232, and -4905 with trapezoidal or sinusoidal waveforms. Custom configurations to meet your specific requirements are available with fast turnaround.

All transformers are manufactured to MIL-T-21038 specifications. Specification Control Drawings are available to help you to document the part selected for your system.



North Hills Model # DX155345-DGL Dual Ratio Data Bus Interface Surface Mount Transformer.

### Features:

- Dual ratio in single surface mount package
- Designed to meet Mil-Std-1553 A/B and MAC AIR Specifications A-3818, A-5690, A-5232 and A-4905
- 55 dB common mode rejection (min.)
- Weight is 3.8 grams

### Benefits:

- Support high speed data transmission requirements in a wide range of industrial and military applications.
- High electrical performance while operating within challenging environments
- Thin low profile (0.155 inches)

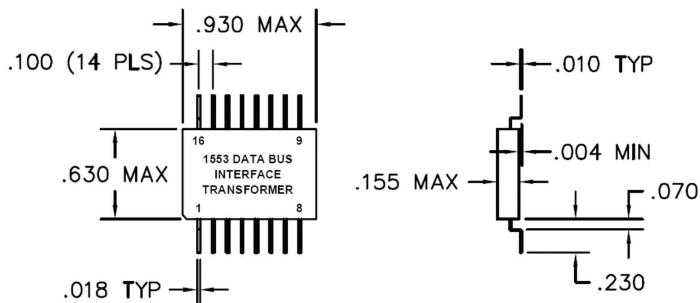
*Further electrical specifications and physical dimensions on page 2.*

For more information: [www.BTTC-Beta.com/DBSMT](http://www.BTTC-Beta.com/DBSMT)

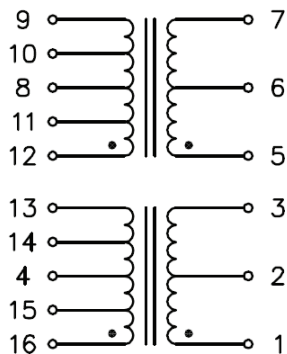


## Technical Drawings

### Mechanical Drawing



### Circuit Diagram



## Ordering Information

Model #	DX155345-DGL
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## Specifications

Electrical	
Parameter	Value
Turns Ratio	1:2.5 $\pm$ 3% (PIN 1-3 to PIN 16-13) 1:2.5 $\pm$ 3% (PIN 5-7 to PIN 12-9) 1:1.79 $\pm$ 3% (PIN 1-3 to PIN 15-14) 1:1.79 $\pm$ 3% (PIN 5-7 to PIN 11-10)
Output Rise Time	<150 ns
Pulse Width	2 $\mu$ s
Overshoot	<1 V
Droop	20% max (250 kHz Input)
Dielectric Withstanding Voltage	100 Vrms
DC Resistance	0.9 $\Omega$ Maximum (PIN 1-3, PIN 5-7) 2.5 $\Omega$ Maximum (PIN 16-13, PIN 12-9)
Input Impedance	4000 $\Omega$ Minimum @ 75 kHz to 1 MHz (PIN 16-13, PIN 12-9)
Insulation Resistance	1000 M $\Omega$ @ 250 VDC
Common Mode Rejection	55 dB min

Mechanical	
Parameter	Value
Case	Diallyl Phthalate (DAP). Color Black
Terminals	Solderable, Printed Circuit, .010 x.018 Alloy 42.
Weight	0.134 oz (3.8 g)

Environmental	
Parameter	Value
Operating Temperature	-55°C to +130°C
Storage Temperature	-55°C to +150°C

Specifications subject to change without notice.



The information in this Brochure is believed to be accurate; however, no responsibility is assumed by Beta Transformer Technology Corporation for its use, and no license or rights are granted by implication or otherwise in connection therewith. Specifications are subject to change without notice.

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