



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

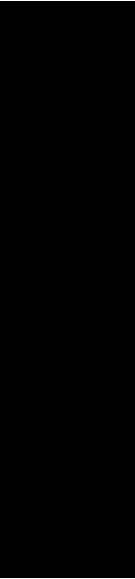
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

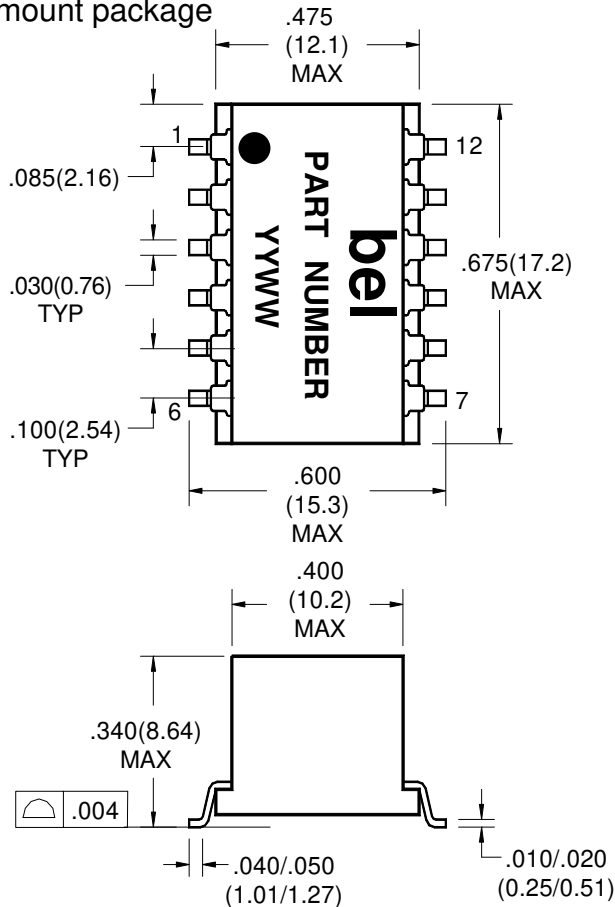


# TRANSFORMERS

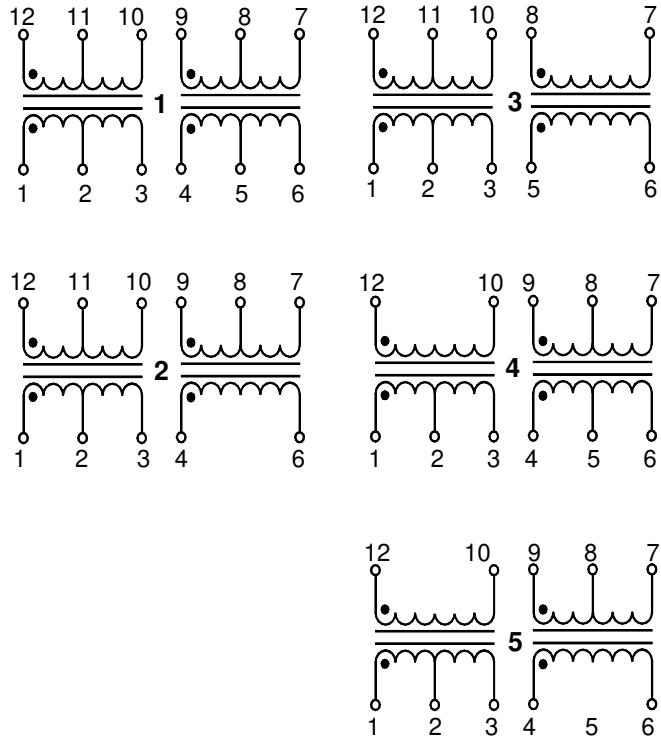


# T1/CEPT/ISDN-PRI TRANSFORMERS DUAL SURFACE MOUNT

Bel introduces a new ISDN TI/CEPT/ISDN-PRI Transformer in a surface mount package



Dual surface mount package contains both transmit and receive transformers.  
Models matched to leading transceiver chips.  
Provide 1500 Vrms Isolation.



## ELECTRICALS SPECIFICATIONS @ 25° C

### Standard Temp. Range Models

Part Number	Turns Ratio (pri:sec +/-5%)	OCL 25° C (mH min)	Cw/w (pf max)	L <sub>L</sub> (uH max)	DRC PRI (ohms max)	DRC SEC (ohms max)	Sch	Primary Pins
S553-6500-10	1ct:2ct & 1ct:2ct	1.2 & 1.2	31 & 31	0.60 & 0.6	0.7 & 0.7	1.2 & 1.2	1	12-10,4-6
S553-6500-11	1ct:2ct & 1:1.36ct	1.2 & 1.2	32 & 37	0.55 & 0.8	0.7 & 0.7	1.2 & 0.9	2	12-10,4-6
S553-6500-12	1:2ct & 1:1.14ct	1.2 & 1.2	40 & 35	0.55 & 0.8	0.7 & 0.7	1.2 & 0.9	5	12-10,4-6
S553-6500-13	1ct:2ct & 1:1	1.2 & 1.2	30 & 30	0.55 & 0.8	0.7 & 0.7	1.2 & 0.7	3	1-3,5-6
S553-6500-14	1:1.15ct & 1ct:2ct	1.5 & 1.2	35 & 35	0.60 & 0.6	0.7 & 0.7	0.9 & 1.2	4	12-10,4-6
S553-6500-15	1:1:1.26 & 1:2ct	1.5 & 1.2	40 & 40	0.40 & 0.5	0.7 & 0.7	0.9 & 1.2	5	12-10,4-6
S553-6500-16	1ct:2ct & 1:1.08ct	1.2 & 1.2	40 & 30	0.60 & 0.6	0.7 & 0.7	1.2 & 0.7	2	12-10,4-6

#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

#### Far East Office

**Bel Fuse Ltd.**  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

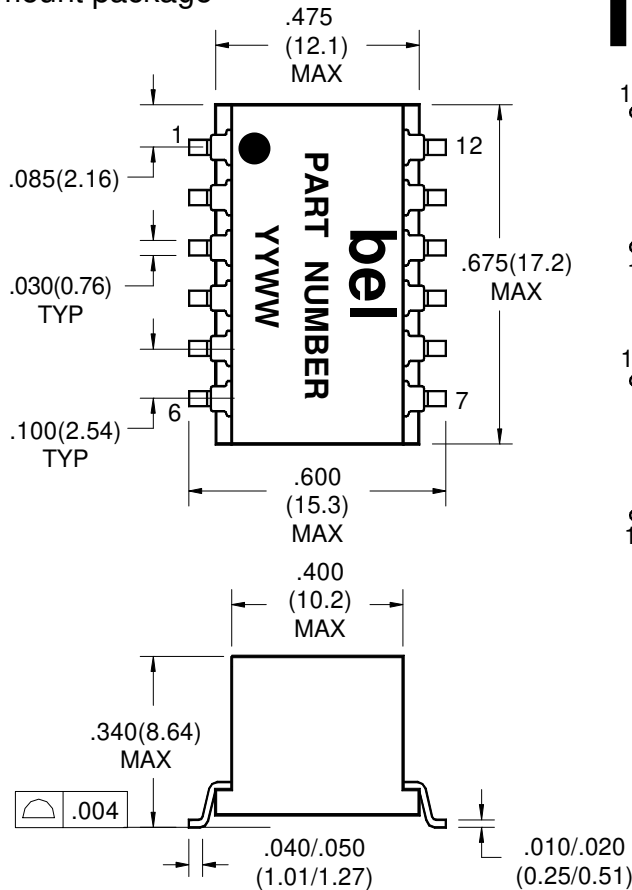
#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

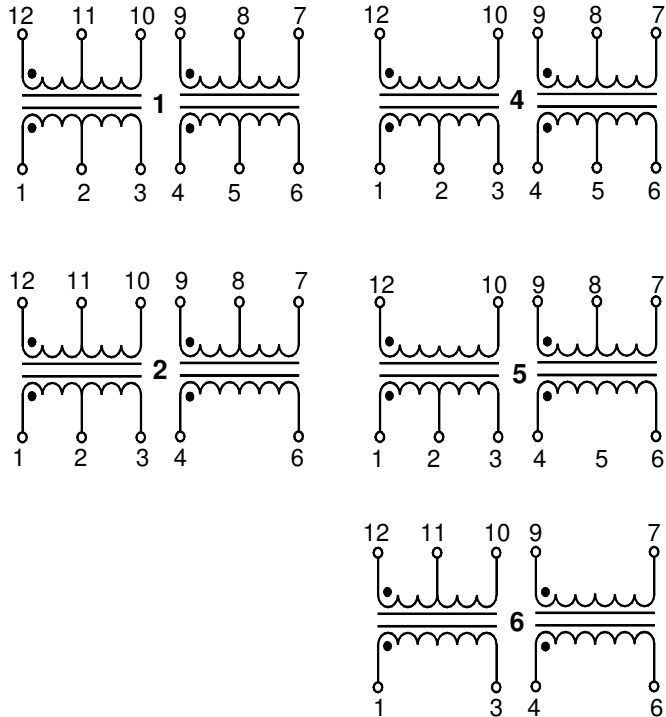
## T1/CEPT/ISDN-PRI TRANSFORMERS DUAL SURFACE MOUNT

TM0002

Bel introduces a new ISDN T1/CEPT/ISDN-PRI Transformer in a surface mount package



Dual surface mount package contains both transmit and receive transformers.  
Models matched to leading transceiver chips.  
Provide 1500 Vrms Isolation.



### ELECTRICALS SPECIFICATIONS @ 25°C

\* Extended Temp. Range Models

Part Number	Turns Ratio (pri:sec +/-5%)	OCL 25° C (mH min)	Cw/w (pf max)	L <sub>L</sub> (uH max)	DRC PRI (ohms max)	DRC SEC (ohms max)	Sch	Primary Pins
S553-6500-03	1ct:1ct & 1ct:1ct	1.2 & 1.2	50 & 50	0.8 & 0.8	1.0 & 1.0	1.0 & 1.0	1	12-10,4-6
S553-6500-05	1ct:2ct & 1ct:2ct	1.2 & 1.2	50 & 50	0.8 & 0.8	1.0 & 1.0	1.7 & 1.7	1	12-10,4-6
S553-6500-06	1ct:2ct & 1:1.36ct	1.6 & 1.6	60 & 50	1.0 & 0.8	1.5 & 1.5	2.0 & 1.7	2	12-10,4-6
S553-6500-07	1:1.15ct & 1ct:2ct	1.5 & 1.2	60 & 50	0.8 & 0.8	1.0 & 1.0	1.0 & 1.7	4	12-10,4-6
S553-6500-08	1:1:1.266 & 1:2ct	1.5 & 1.2	50 & 60	0.8 & 0.8	1.0 & 1.0	1.1 & 1.7	5	12-10,4-6
S553-6500-09	2:2ct & 2:1	1.6 & 1.6	50 & 40	1.3 & 1.3	1.1 & 1.1	1.1 & 0.7	6	1-3,4-6

At -40 degree C, OCL is 600 uH min. for all low temp. models with the exception of S553-6500-09 which is 800 uH min.. All other parameters are specified at +25 degree C only.

\*Extended temp. range is -40°C to +85°C

#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

#### Far East Office

**Bel Fuse Ltd.**  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

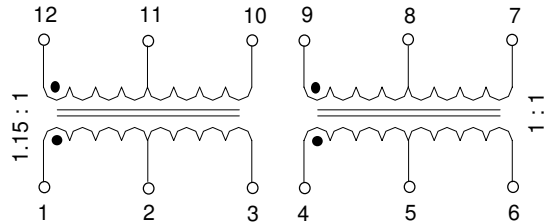


**T1/CEPT/ISDN-PRI TRANSFORMER  
S559-6400-00**

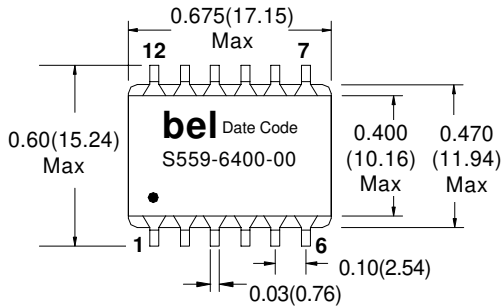
Bel offers a dual, T1, surface mount transformer packaged to provide both transmit and receive transformers. This design is easily customized for other leading transceiver chips by adjusting the turns ratio.

- \* Dielectric Strength 1500 VAC.
- \* Temperature Range is -40°C to 85°C.

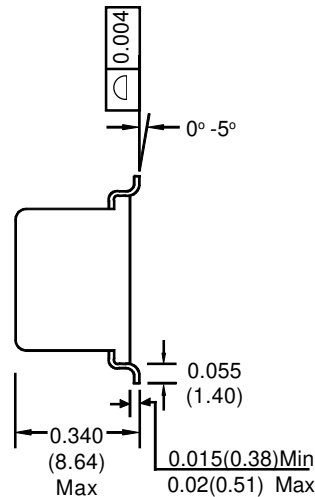
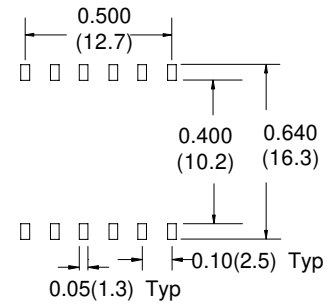
**SCHEMATIC**



**MECHANICALS**



**SUGGESTED PAD LAYOUT**



**ELECTRICALS @ 25° C**

Part Number	Turns Ratio +/- 5%	
	Pins (10-12):(1-3)	Pins (4-6):(7-9)
S559-6400-00	1CT:1.15CT	1CT:1CT

All dimensions are in inches(mm).  
Dimension Tolerance is +/-0.01(0.25) unless otherwise specified.

Part Number	Primary Inductance OCL (mH) Min	Leakage Inductance L <sub>L</sub> (μH) Max	Interwinding Capacitance (pF) Max	DCR (ohms) Max				Dielectric Strength (VAC)
	Pins (4-6) and Pins (10-12)	Pins (4-6) and Pins (10-12)	Pins (1,2,3) to Pins (10,11,12) and Pins (4,5,6) to Pins (7,8,9)	Pins (1-3)	Pins (4-6)	Pins (7-9)	Pins (10-12)	
S559-6400-00	1.5	0.8	60	1.1	1.0	1.0	1.0	1500

Dielectric Strength is measured Pins (1,2,3) to Pins (10,11,12) and Pins (4,5,6) to Pins (7,8,9).  
Primary Inductance, Leakage Inductance, and Interwinding Capacitance are measured at 100KHz, 0.02VAC.

**Corporate Office**  
Bel Fuse Inc.  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

**Far East Office**  
Bel Fuse Ltd.  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

**European Office**  
Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

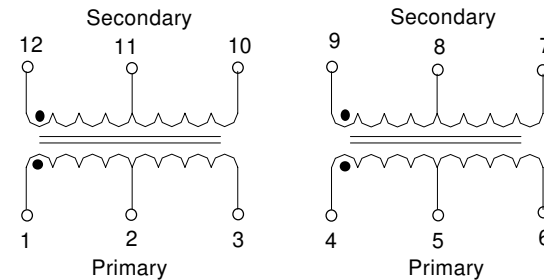
## T1/CEPT/ISDN-PRI TRANSFORMER S553-6500-26

TM0004

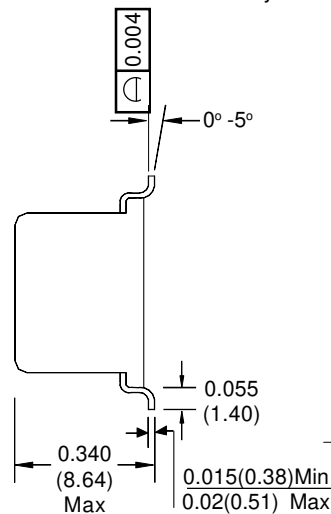
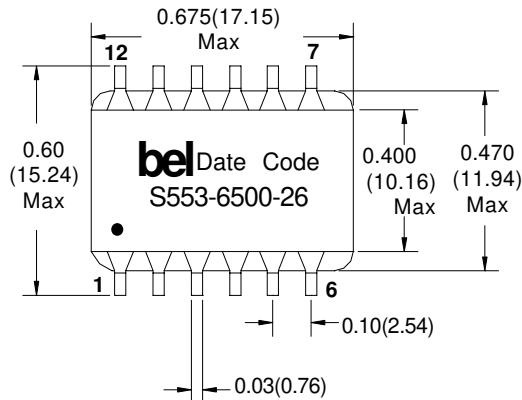
Bel offers a dual, T1, surface mount transformer packaged to provide both transmit and receive transformers. This design is easily customized for other leading transceiver chips by adjusting the turns ratio.

- \* Dielectric Strength 1500 VAC.
- \* Extended Temperature Range is -40°C to 85°C.

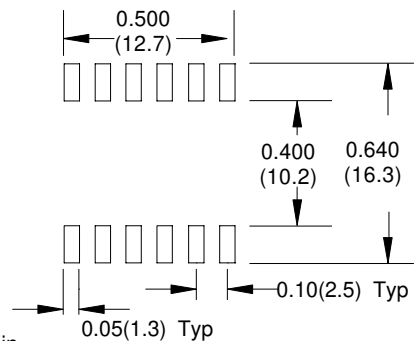
### SCHEMATIC



### MECHANICALS



### SUGGESTED PAD LAYOUT



### ELECTRICALS @ 25° C

Part Number	Turns Ratio +/- 2%	
	Pins (10-12):(1-3)	Pins (4-6):(7-9)
S553-6500-26	1CT:1.CT	1CT:2CT

All dimensions are in inches(mm).  
Dimension Tolerance is +/-0.01(0.25)  
unless otherwise specified.

Part Number	Primary Inductance OCL(mH) Min	Leakage Inductance L <sub>r</sub> (μH) Max	Interwinding Capacitance (pF) Max	DCR (ohms) Max				Dielectric Strength (VAC)
	Pins (1-3) and Pins (4-6)	Pins (1-2) and Pins (4-6)	Pins (1,2,3) to Pins (10,11,12) and Pins (4,5,6) to Pins (7,8,9)	Pins (1-3)	Pins (4-6)	Pins (7-9)	Pins (10-12)	
S553-6500-26	1.2	0.8	50	1.0	1.0	1.8	1.0	1500

Dielectric Strength is measured Pins (1,2,3) to Pins (10,11,12) and Pins (4,5,6) to Pins (7,8,9).  
Primary Inductance, Leakage Inductance, and Interwinding Capacitance are measured at 100KHz, 0.02VAC.

#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

#### Far East Office

**Bel Fuse Ltd.**  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

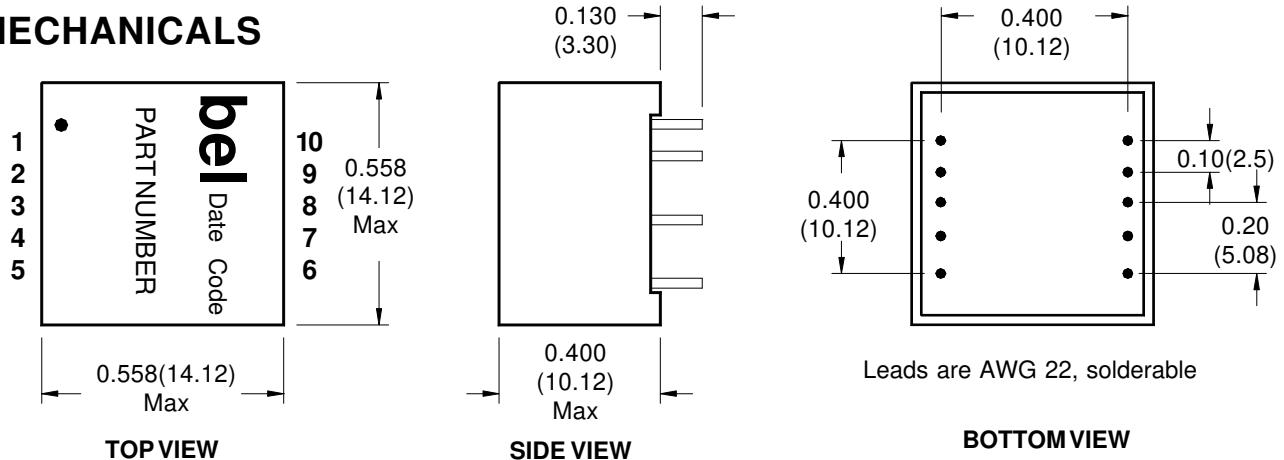
#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

# T1/CEPT/ISDN-PRI TRANSFORMERS ENHANCED 3000VRMS ISOLATION

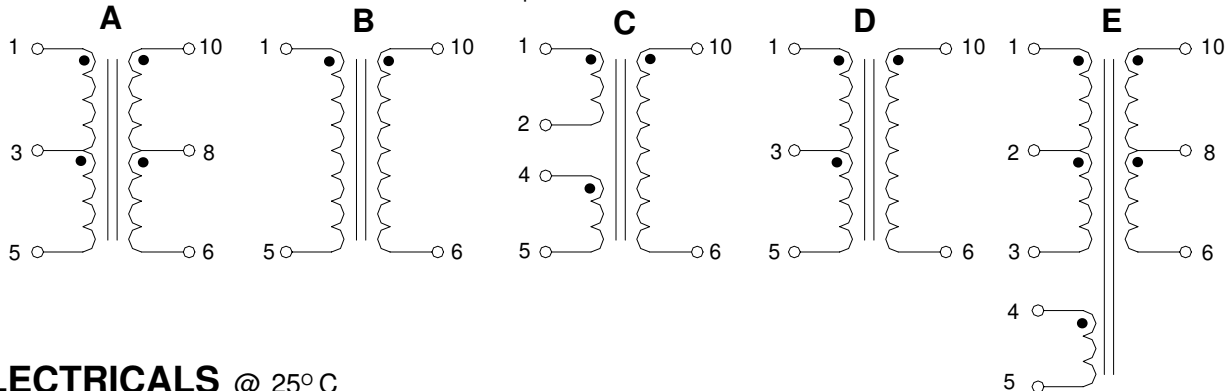
TM0005

## MECHANICALS



## SCHEMATICS

All dimensions are in inches(mm) +/- 0.01(0.25) unless otherwise specified.



## ELECTRICALS @ 25°C

Part Number	Turns Ratio +/- 2%	Primary Pins	OCL Primary (mH) Min	C <sub>ww</sub> (pF) Max	L <sub>L</sub> (μH) Max	DCR Pri (ohms) Max	DCR Sec (ohms) Max	Schem.
0553-6500-19	1:1	1-5	1.20	30	0.50	0.70	0.70	B
0553-6500-20	1CT:2CT	1-5	1.20	30	0.30-0.50	0.70	1.10	A
0553-6500-21	1:1.36CT	10-6	1.20	35	0.60	0.70	0.90	D
0553-6500-22	1:1:2	1-5(2,4 sh)	0.80	25	0.50	0.70	0.70	C
0553-6500-23	1:1:1.58	1-5 (2,4 sh)	0.80	18	0.70	0.70	0.50	C
Extended Temperature Units, -40°C to 85°C								
0553-6500-17	1:1:1.26	10-6	1.50	35	0.60	0.70	1.10	D
0553-6500-18	1CT:2CT	1-5	1.20	30	0.55	0.70	1.10	A
0553-6500-24	1CT:3CT:1	1-3	0.60	30	0.80	0.70	1.70	E

### Corporate Office

**Bel Fuse Inc.**  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: <http://www.belfuse.com>

### Far East Office

**Bel Fuse Ltd.**  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

### European Office

**Bel Fuse Europe Ltd.**  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366

## T1 CARRIER INTERFACE TRANSFORMERS T1/CEPT Telecom Line Interface Applications

TM0006

Bel provides transformer magnetics in several package and schematic variations for T1/CEPT Telecom Line Interface Applications. Bel's high quality semi-automated processes provide superior single small form, and standard dual transformers.

- \* 2000 Vrms Isolation.
- \* Primary Inductance is 1.20mH minimum.
- \* Primary DCR is 0.80 ohms maximum.
- \* Custom designs available upon request.

### ELECTRICALS @ 25° C

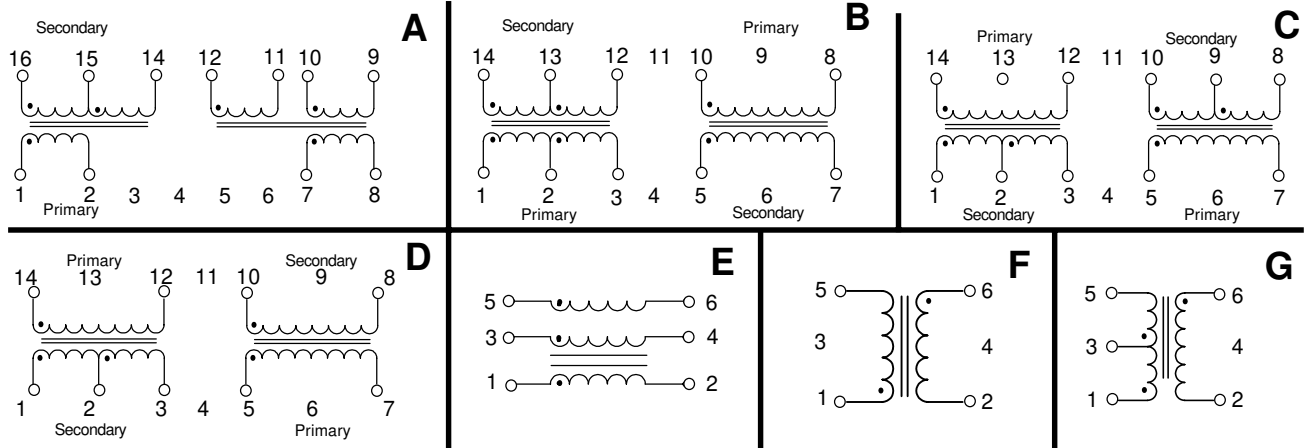
Part Number	Turns Ratio (+/- 5%)	Leakage Inductance $L_L$ (uH) Max	Coupling Capacitance $C_{ww}$ (pF) Max	Sec DCR (ohms) Max	#Pins on Package and Style	Schem.
A553-0013-00	1:1.385CT/1:1:1	0.80/0.50	35	0.80	16 Topper	A
A553-0013-01	1CT:2CT/1:1	0.80/0.50	35	1.8/0.80	14 Topper	B
A553-0013-03	1:1.385CT/1:1CT	0.80/0.50	35	0.80/0.80	14 Topper	C
A553-0013-05	Pins (1-2):(14:12) 1:1 (1-3):(14:12) 1.25:1 (5-7):(10:8) 1:2CT	0.50/0.50/0.80	50	0.80/0.80/1.8	14 Topper	C
A553-0013-06	1:2CT/1:2CT	0.80/0.80	35	1.8/1.8	14 Topper	C
A553-0013-07	1:1.15CT/1:2CT	0.50/0.80	35	0.80/1.8	14 Topper	C
A553-0013-08	1:1:1.266/1:2CT	0.80/0.80	35	0.80/1.8	14 Topper	C
0553-0013-IC	1:1:1	0.50	35	0.80	6 "T" Topper	E
0553-0013-AC	1:1	0.50	35	0.80	6 "T" Topper	F
0553-0013-BC	1CT:1	0.50	35	0.80	6 "T" Topper	G
0553-0013-HC	1CT:2CT	0.80	35	1.8	6 "T" Topper	K
0553-0013-1J	1:2CT/1:2CT	0.80/0.80	35	1.8/1.8	14 DIL	C
0553-0013-2J	1:2CT/1:1.36	0.80/0.80	35	1.8/0.80	14 DIL	D
0553-0013-4J	1CT:2CT/1:1	0.80/0.50	35	1.8/0.8	14 DIL	B
0553-0013-RC	1:1.15CT	0.50	35	0.80	6 "T" Topper	G
0553-0013-SC	1:1:1.266	0.80	35	0.80	6 "T" Topper	E
0553-1167-00	1:1:1.266/1:2CT	0.50/0.60	35/40	0.80/1.8	14 DIL	C

Schematic and Mechanical information for the above components are located on the facing page.



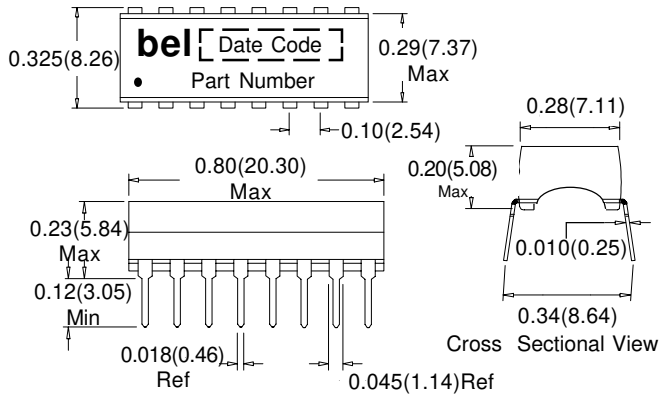
# T1 CARRIER INTERFACE TRANSFORMERS

## SCHEMATICS



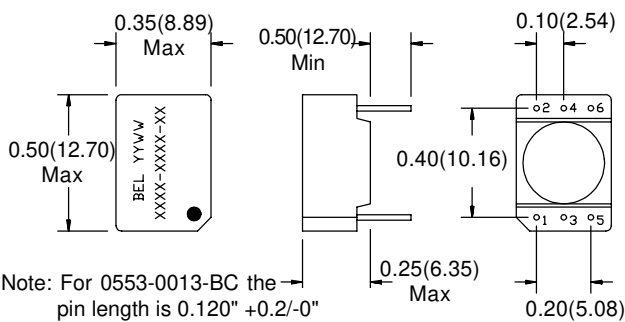
## MECHANICALS

### Package Style (14/16 Pins)



Note: For 14 Pin package, external package dimensions and pin distances are identical. There are only seven pins per side.

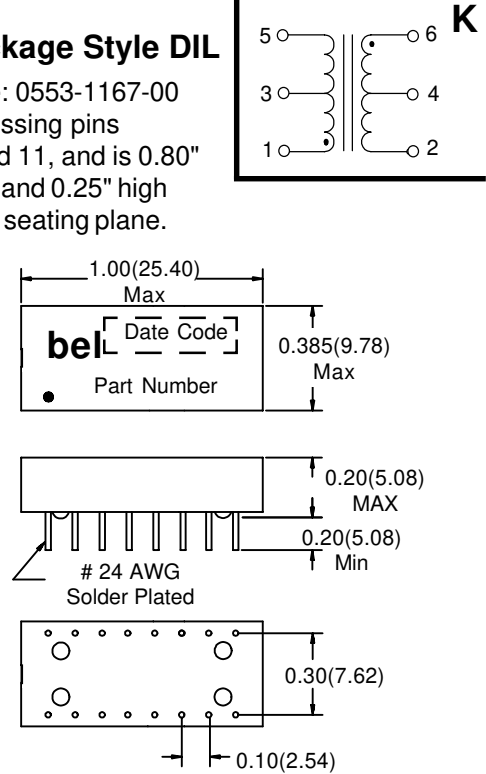
### Package Style "T"



Note: For 0553-0013-BC the pin length is 0.120" +0.2/-0"

### Package Style DIL

Note: 0553-1167-00 is missing pins 4 and 11, and is 0.80" long and 0.25" high from seating plane.



Dimensions are in inches(mm). Dimension Tolerance is +/- 0.02(0.51) unless otherwise specified.

### Corporate Office

**Bel Fuse Inc.**  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: http://www.belfuse.com

### Far East Office

**Bel Fuse Ltd.**  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

### European Office

**Bel Fuse Europe Ltd.**  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366

## SURFACE MOUNT T1 CARRIER INTERFACE TRANSFORMERS T1/CEPT Telecom Line Interface Applications

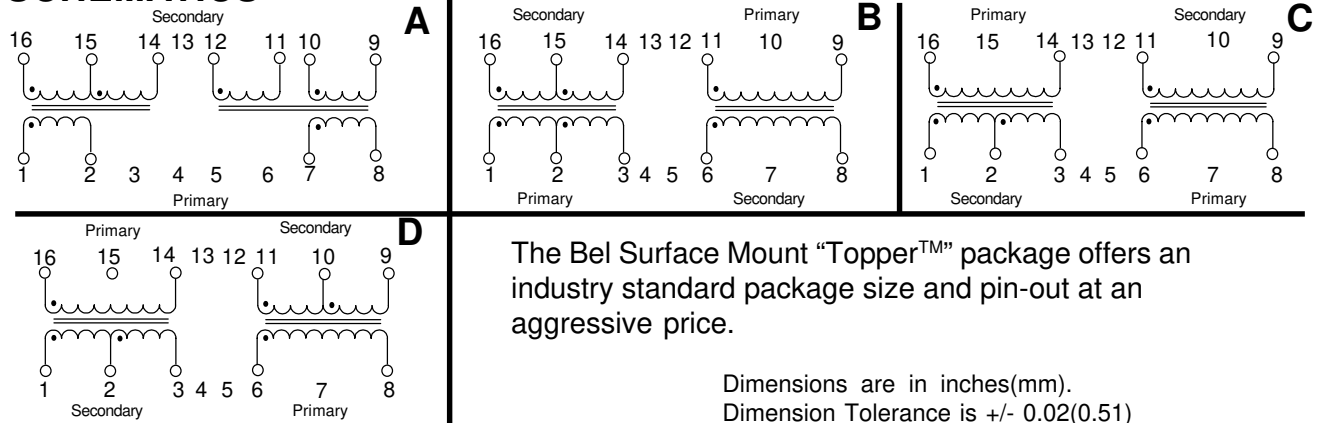
TM0007

Bel offers a new cost effective package on our standard T1/CEPT Telecom Interface Line Transformers. This sixteen lead, surface mount package, provides a superior, cost effective, quality product.

### ELECTRICALS @ 25°C

Part Number	Turns Ratio T1/T2	Leakage Inductance $L_L$ ( $\mu$ H) Max	DCR (ohms) Max	Schematic
S553-0013-00	1:1.385CT/1:1:1	0.80/0.50	0.80	A
S553-0013-01	1CT:2CT/1:1	0.80/0.50	1.80/0.80	B
S553-0013-02	1:2CT/1:1.36	0.80/0.80	1.80/0.80	C
S553-0013-03	1:2CT/1:2CT	0.80/0.80	0.80/1.80	D
S553-0013-06	1:1.15CT/1:2CT	0.50/0.80	0.80/1.80	D
S553-0013-07	1:1:1.266/1:2CT	0.80/0.80	0.80/1.80	D

### SCHEMATICS

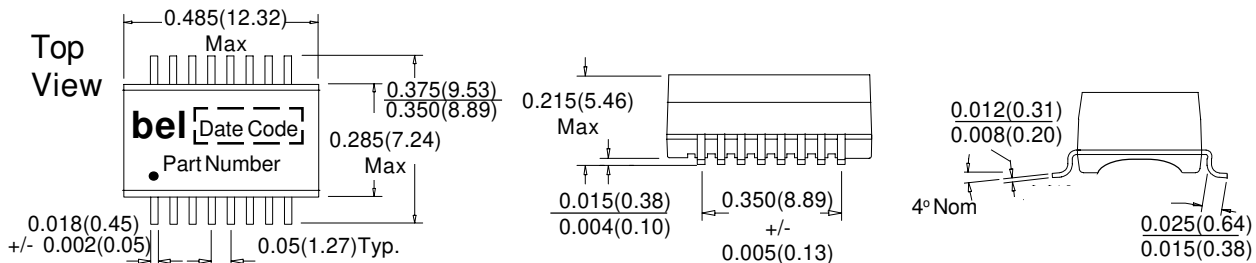


The Bel Surface Mount "Topper™" package offers an industry standard package size and pin-out at an aggressive price.

Dimensions are in inches(mm).  
Dimension Tolerance is +/- 0.02(0.51)  
unless otherwise specified.

### MECHANICALS

Package Style SMT



#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: [BelFuse@belfuse.com](mailto:BelFuse@belfuse.com)  
Internet: <http://www.belfuse.com>

#### Far East Office

**Bel Fuse Ltd.**  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

**SURFACE MOUNT T1 CARRIER  
INTERFACE TRANSFORMERS**  
T1/CEPT Telecom Line Interface Applications

TM0008

Bel offers a new cost effective package on our standard T1/CEPT Telecom Interface Line Transformers. This sixteen lead, "Topper™", surface mount package, provides a superior, cost effective, quality product.

- \* High Pot 2000 Vrms measured for one minute.
- \* Primary Inductance (OCL) is 1.20 Milihenries minimum.
- \* Primary DCR is 0.80 ohms maximum.

**ELECTRICALS @ 25° C**

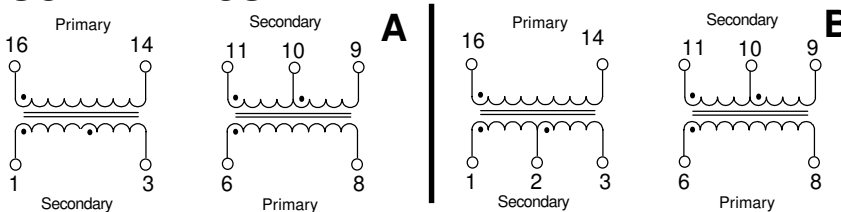
Part Number	Turns Ratio T1/T2	Leakage Inductance L <sub>L</sub> (μH) Max	DCR (ohms) Max	Coupling Capacitance (pF) Max	Schematic
S553-0013-04	1:1.7/1:2CT	0.50/0.80	0.80/1.80	35	A
S553-0013-05	1:1/1:1.25/1:2CT	0.50/0.50/0.80	0.80/1.10/1.80	50	B

\* Coupling Capacitance (C<sub>ww</sub>) is 35 PicoFarads maximum.

\* Custom designs available.

Turns ratio of S553-0013-05 ia (1-2):(16-14)/(1-3):(16-14)/(5-8):(9-11)

**SCHEMATICS**

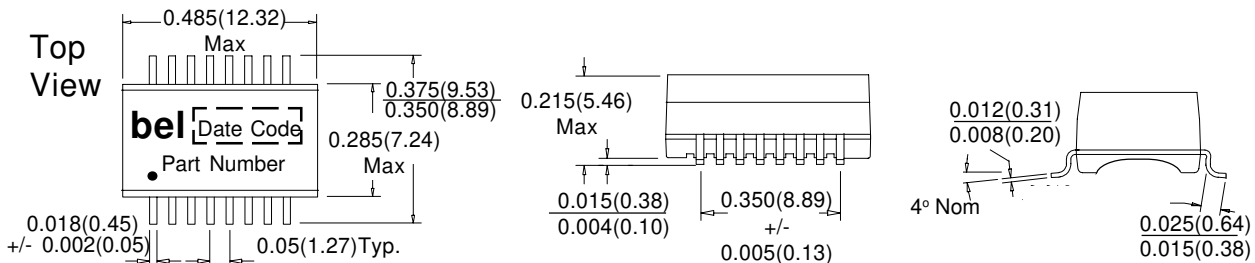


The Bel Surface Mount "Topper™" package offers an industry standard package size and pin-out at an aggressive price.

Dimensions are in inches(mm).  
Dimension Tolerance is +/- 0.02(0.51) unless otherwise specified.

**MECHANICALS**

Package Style SMT



**Corporate Office**  
Bel Fuse Inc.  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

**Far East Office**  
Bel Fuse Ltd.  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

**European Office**  
Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

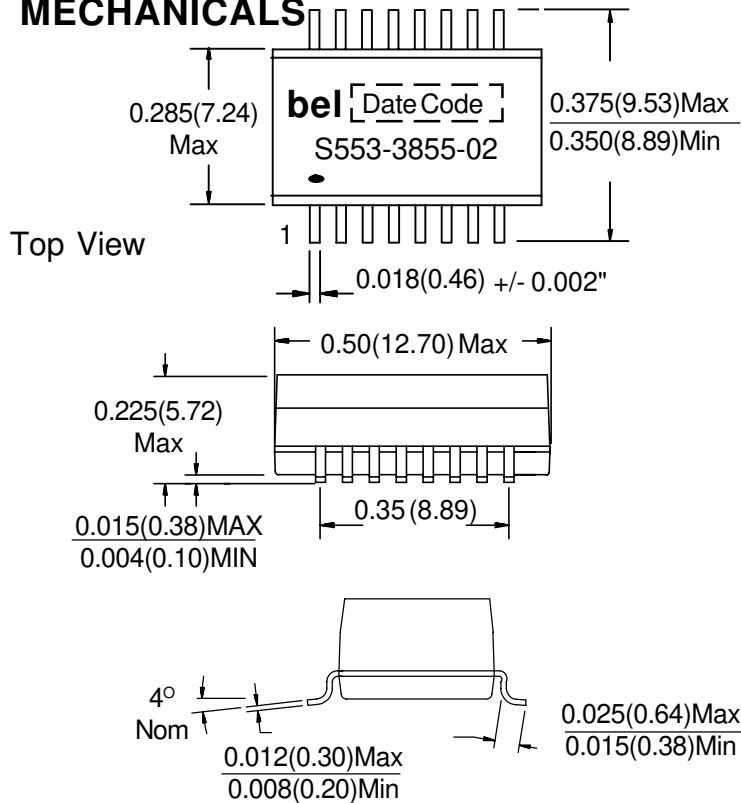
## T1/CEPT/ISDN-PRI TRANSFORMER S553-3855-02

TM0009

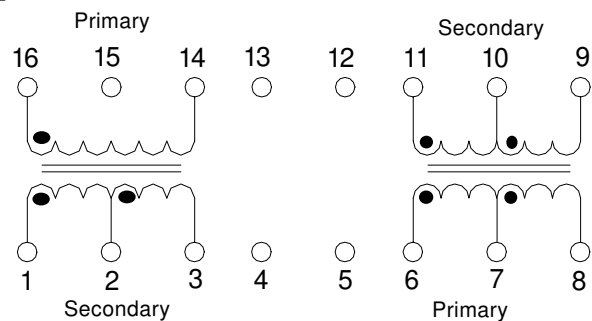
Bel introduces a new "pick and place" compatible, small footprint, surface mount impedance matching transformer for ISDN-PRI/T1/CEPT applications.

- \* Pick and Place Compatible.
- \* Small form factor to maximize board space.

### MECHANICALS



### SCHEMATIC



Dimensions in inches (mm)  
Dimension tolerance +/- 0.01(0.25)  
unless otherwise stated

### ELECTRICALS @ 25° C

Part Number	Turns Ratio		Primary Inductance OCL (mH) Min	Leakage Inductance L <sub>L</sub> (mH) Max		Interwinding Capacitance C <sub>ww</sub> (pF) Max	DC Resistance DCR Pri (ohm) Max	DC Resistance DCR Sec (ohm) Max		Hipot (Vrms) Min
	Pins (16-14):(1-3)	Pins (6-8):(11-9)		Pins (16-14)*	Pins (6-8)**			Pins (1-3)	Pins (11-9)	
S553-3855-02	1:1.15CT	1CT:2CT	1.20	0.6	0.8	30	0.70	0.70	1.00	1500

\* Leakage Inductance is measured with Pins (1-3) shorted.  
\*\* Leakage Inductance is measured with Pins (11-9) shorted.

**Corporate Office**  
Bel Fuse Inc.  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

**Far East Office**  
Bel Fuse Ltd.  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

**European Office**  
Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

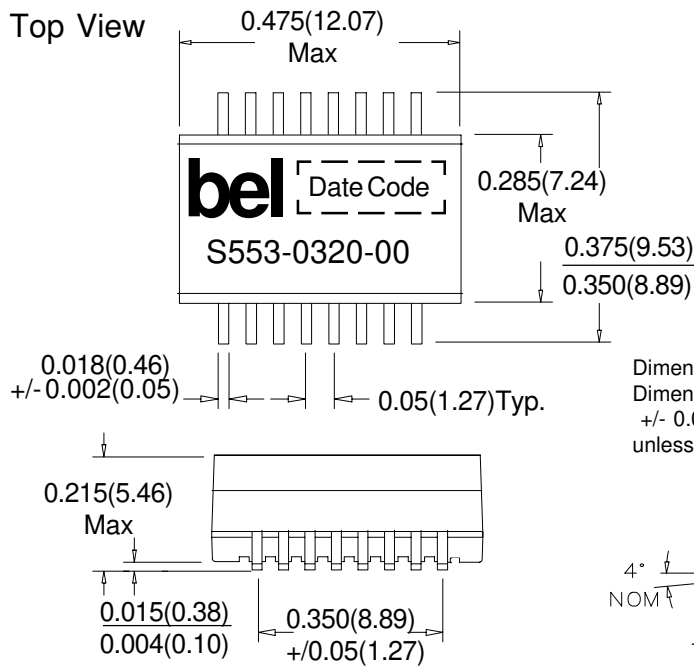
**T1 SURFACE MOUNT TRANSFORMER**  
S553-0320-00

TM0010

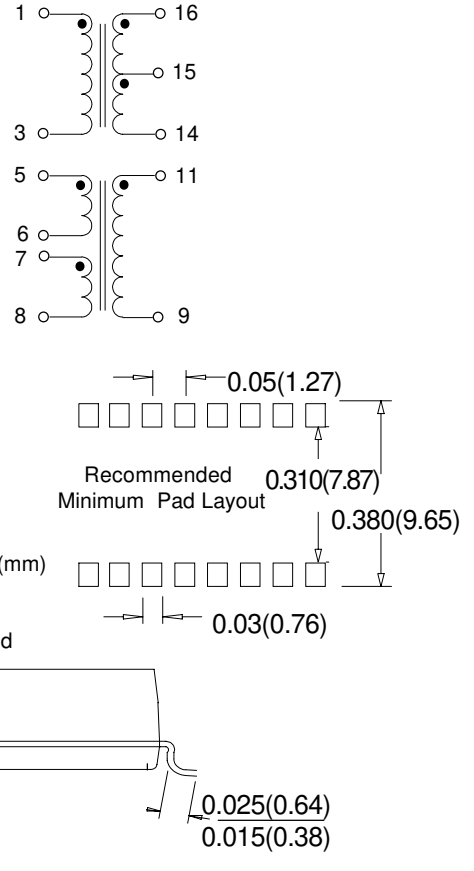
Bel introduces a T1 transformer designed to support the industry's aggressive price requirements, while remaining fit and function compatible to the industry standards. Carefully controlled internal construction provides minimal insertion and return loss.

\* Input to Output Isolation Voltage is 2000 Vrms, measured for 1 second.

**M  
E  
C  
H  
A  
N  
I  
C  
A  
L  
S**



**S  
C  
H  
E  
M  
A  
T  
I  
C**



**ELECTRICALS @ 25° C**

Part Number	Turns Ratio (+/- 5%)	Primary Inductance OCL (mH) min	Leakage Inductance L <sub>L</sub> (nH) Max	Leakage Inductance L <sub>L</sub> (nH) Max	Coupling Capacitance C <sub>ww</sub> (pF) Max
		1:2 2:2:1	Pins (1-3) to Pins (5-6)	Pins (1-3) tie Pins (16,15,14)	Pins (5-6) tie Pins (11,9)
S553-0320-00		1.2	500	1000	35

Electricals measured at 100KHz, 20mV.

**Corporate Office**  
Bel Fuse Inc.  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

**Far East Office**  
Bel Fuse Ltd.  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

**European Office**  
Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366



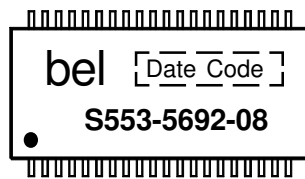
## TRANSFORMER MODULE S553-5692-08

TM0011

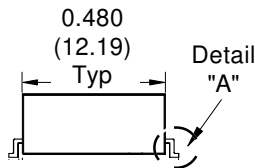
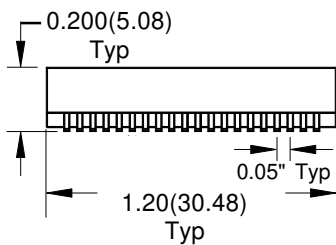
Bel now provides a one component, surface mount transformer module. The compact packaging allows for a "single component" solution which provides cost reduction and placement ease.

\* 1500 Vrms Isolation.

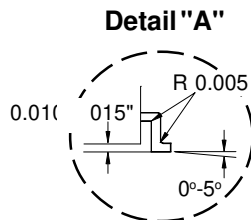
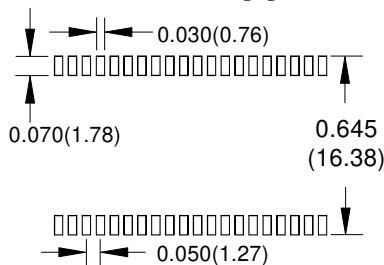
### MECHANICALS



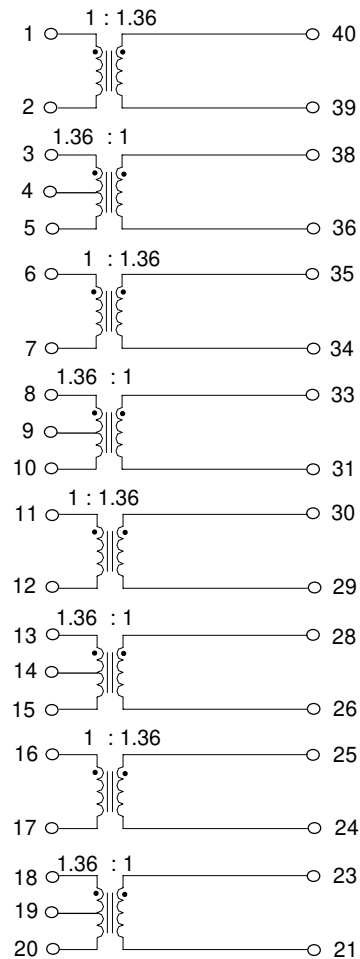
All dimensions are in inches(mm).  
Dimension tolerance is +/- 0.01(0.25)  
unless otherwise specified.



### RECOMMENDED PCB PAD LAYOUT



### SCHEMATIC



### ELECTRICALS at 25°C

Part Number	Turns Ratio +/- 2%		Primary Inductance OCL (mH) Min	DC Resistance (Ω)		Leakage Inductance L <sub>L</sub> (μH) Max	Interwinding Capacitance C <sub>ww</sub> (pF)	Isolation Voltage (Vrms)
	Primary	Secondary		Primary	Secondary			
S553-5692-08	1 : 1.36	1.36 : 1	1.25	1.9	2.8	0.8	35	1500

Leakage Inductance measured at 100kHz.

**Corporate Office**  
Bel Fuse Inc.  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

**Far East Office**  
Bel Fuse Ltd.  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

**European Office**  
Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

# TRANSFORMER MODULE

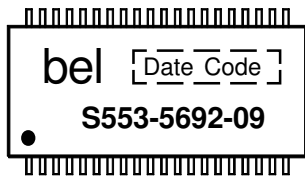
## S553-5692-09

TM0012

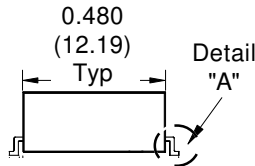
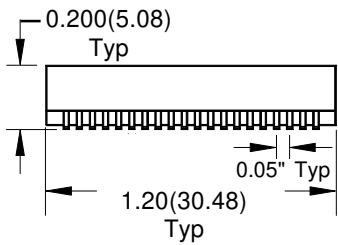
Bel now provides a one component, surface mount transformer module. The compact packaging allows for a "single component" solution which provides cost reduction and placement ease.

\* 1500 Vrms Isolation.

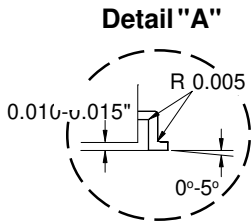
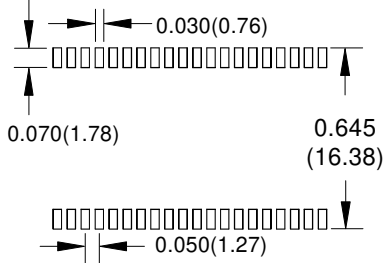
### MECHANICALS



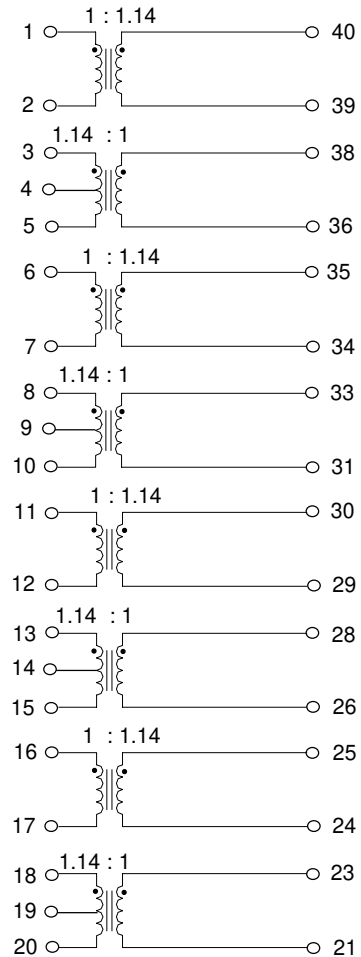
All dimensions are in inches(mm).  
Dimension tolerance is +/- 0.01(0.25) unless otherwise specified.



### RECOMMENDED PCB PAD LAYOUT



### SCHEMATIC



### ELECTRICALS @ 25° C

Part Number	Turns Ratio +/- 2%		Primary Inductance OCL (mH) Min	DC Resistance (Ω)		Leakage Inductance L <sub>L</sub> (μH) Max	Interwinding Capacitance C <sub>ww</sub> (pF)	Isolation Voltage (Vrms)
	Primary	Secondary		Primary	Secondary			
S553-5692-09	1:1.14	1.14:1	1.25	2.2	2.6	0.8	35	1500

Leakage Inductance measured at 100kHz.

**Corporate Office**  
**Bel Fuse Inc.**  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: http://www.belfuse.com

**Far East Office**  
**Bel Fuse Ltd.**  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

**European Office**  
**Bel Fuse Europe Ltd.**  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366

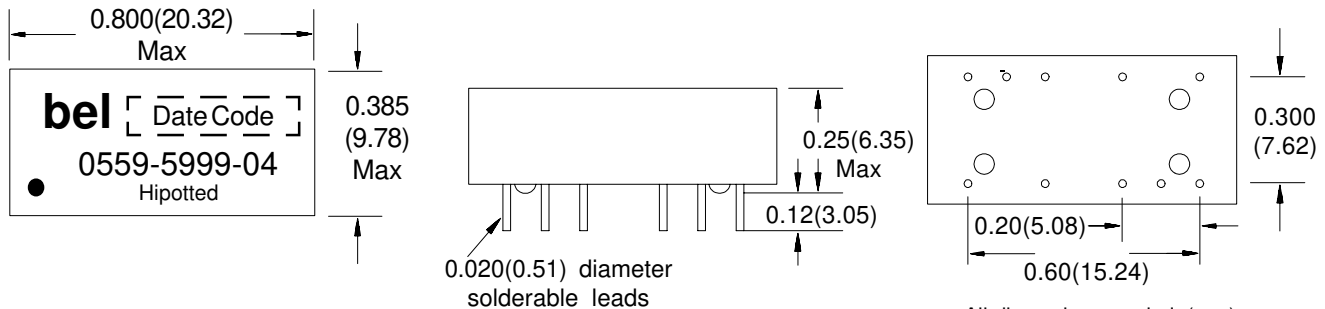
## T1 TRANSFORMER 0559-5999-04

TM0013

Bel introduces a new dual-in-line, T1 Transformer.

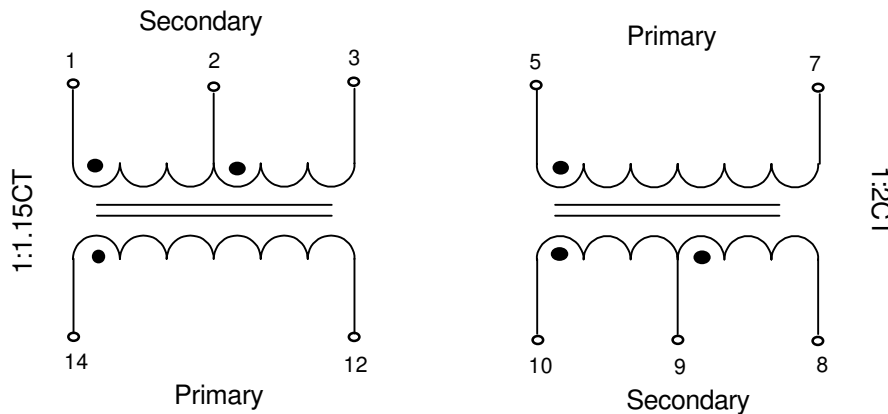
\* Isolation Voltage is 1500 Vrms

### MECHANICALS



All dimensions are in in(mm).  
Dimension tolerance is +/-0.02(0.51) unless otherwise specified.

### SCHEMATIC



### ELECTRICALS @ 25° C

Part Number	Primary Inductance OCL (mH) Min		Leakage Inductance $L_L$ ( $\mu$ H) Max		Coupling Capacitance $C_{ww}$ (pF) Max		DCR $\Omega$ (ohms) Max	
	Pins (5-7)	Pins (14-12)	Pins (5-7)	Pins (14-12)	Pins (14-1)	Pins (5-10)	Pins (5-7) to (14-12)	Pins (1-3) to (8-10)
0559-5999-04	1.2	1.5	0.5	0.6	35	40	0.7	1.1

Primary Inductance and Leakage Inductance measured at 100KHz, 20mV.

#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: <http://www.belfuse.com>

#### Far East Office

**Bel Fuse Ltd.**  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

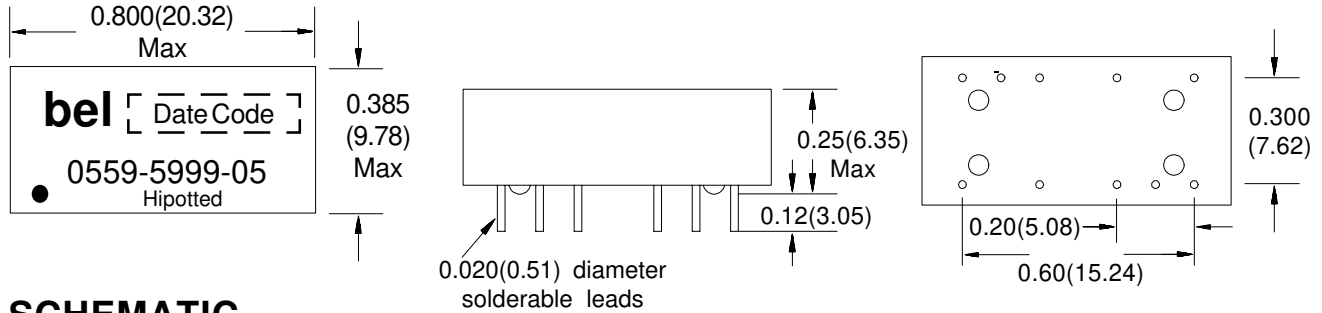
**T1 TRANSFORMER**  
0559-5999-05

TM0014

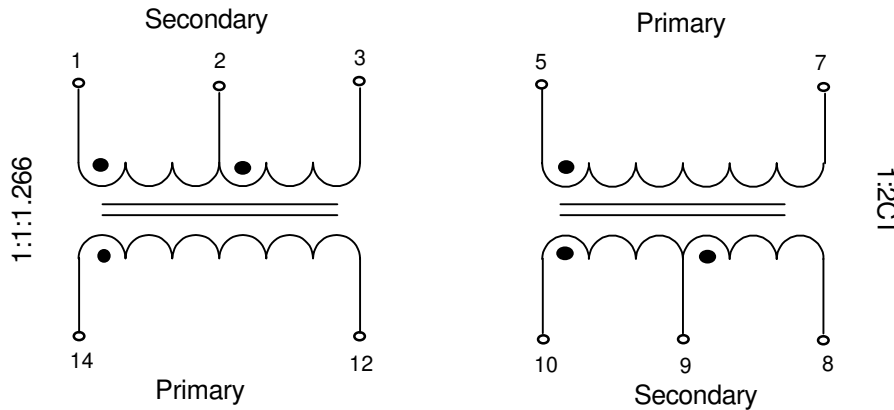
Bel introduces a new dual-in-line, T1 Transformer.

\* Isolation Voltage is 1500 Vrms

**MECHANICALS**



**SCHEMATIC**



All dimensions are in in(mm).  
Dimension tolerance is +/-0.02(0.51) unless otherwise specified.

Note: Pins (14-12) to Pins (1-3) is a 1:1.266 and Pins (14-12) to Pins (2-3) is a 1:1

**ELECTRICALS @ 25° C**

Part Number	Primary Inductance OCL (mH) Min		Leakage Inductance $L_L$ ( $\mu$ H) Max		Coupling Capacitance $C_{ww}$ (pF) Max		DCR $\Omega$ (ohms) Max	
	Pins (5-7)	Pins (14-12)	Pins (5-7)	Pins (14-12)	Pins (14-1)	Pins (5-10)	Pins (5-7) to (14-12)	Pins (1-3) to (8-10)
0559-5999-05	1.2	1.5	0.4	0.5	35	40	0.7	1.1

Primary Inductance and Leakage Inductance measured at 100KHz, 20mV.

**Corporate Office**  
Bel Fuse Inc.  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

**Far East Office**  
Bel Fuse Ltd.  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

**European Office**  
Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

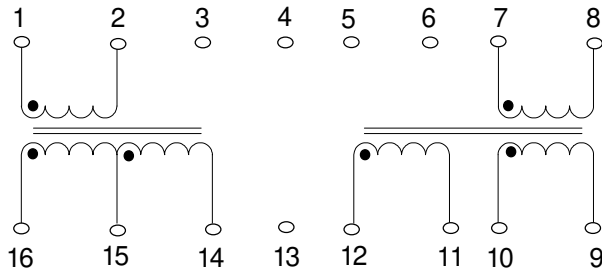
## T1 TRANSFORMER 0553-5841-00

TM0015

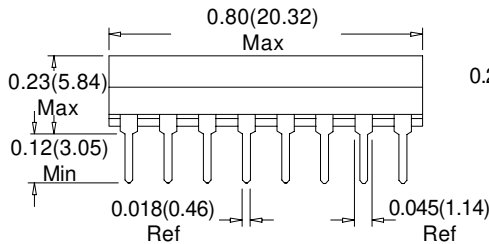
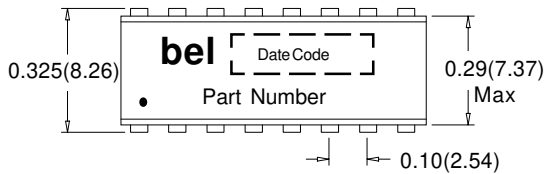
Bel offers a new T1 transformer. Precision winding in combination with semi-automated manufacturing processes provide a quality product.

- \* 1000 Vrms Isolation.
- \* Operating Temperature Range 0°C to 70°C.
- \* Able to withstand aqueous washes.

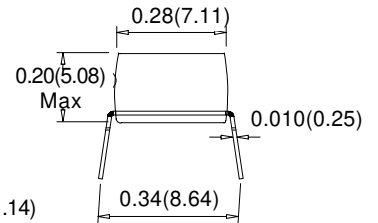
### SCHEMATIC



### MECHANICALS



### Cross Sectional Views



Dimensions are in inches(mm). Dimension tolerance is equal to +/- 0.01(0.25) unless otherwise stated.

### ELECTRICALS @ 25° C.

Part Number	Turns Ratio (+/- 5%)		Inductance OCL (mH) Min	Leakage Inductance $L_L$ (nH) Max		DCR (mohms) Max		Coupling Capacitance $C_{ww}$ (pF) Max
	Pins (1-2):(16-14)	Pins (7-8):(12-11):(10-9)		Pins (1-2) tie Pins (7-8)	Pins (14,15,16)	Pins (7-8) tie Pins (9,10,11,12)	Pins (1-2) and Pins (7-8)	
0553-5841-00	1 : $\sqrt{2}$ CT	1 : 1 : 1	1.2	800	500	800	1100	35

#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: <http://www.belfuse.com>

#### Far East Office

**Bel Fuse Ltd.**  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366



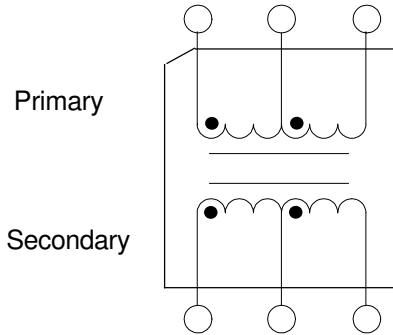
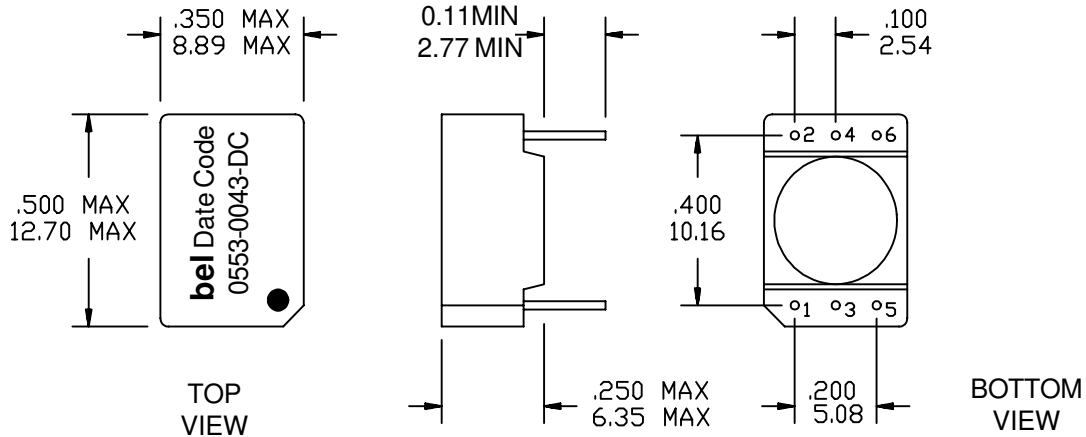
**ISDN TRANSFORMER  
0553-0043-DC**

TM0016

Bel provides a new transformer to be used with the Echelon Lontalk applications.

- \* Primary Inductance is 3.5 mH minimum.
- \* Isolation Voltage - 1500Vrms.

**M  
E  
C  
H  
A  
N  
I  
C  
A  
L  
S**



Dimensions in <sup>inches</sup>/<sub>(mm)</sub>  
Dimension tolerance +/- 0.01(0.25) unless otherwise stated

**SCHEMATIC**

**ELECTRICALS**

Part Number	Primary Inductance OCL (μH) Min	Turns Ratio	DCR ohms (max)	
	Pins (1-5)	Pins (1-5):(2-6)	Pins (1-5)	Pins (2-6)
0553-0043-DC	3.5	1CT:1CT	0.5	0.5

Electricals @ 25° C.  
Primary Inductance is measured at 20 mV @ 10 KHz..

**Corporate Office**  
Bel Fuse Inc.  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

**Far East Office**  
Bel Fuse Ltd.  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

**European Office**  
Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

## T1/CEPT/ISDN-PRI TRANSFORMER 0553-0013-13

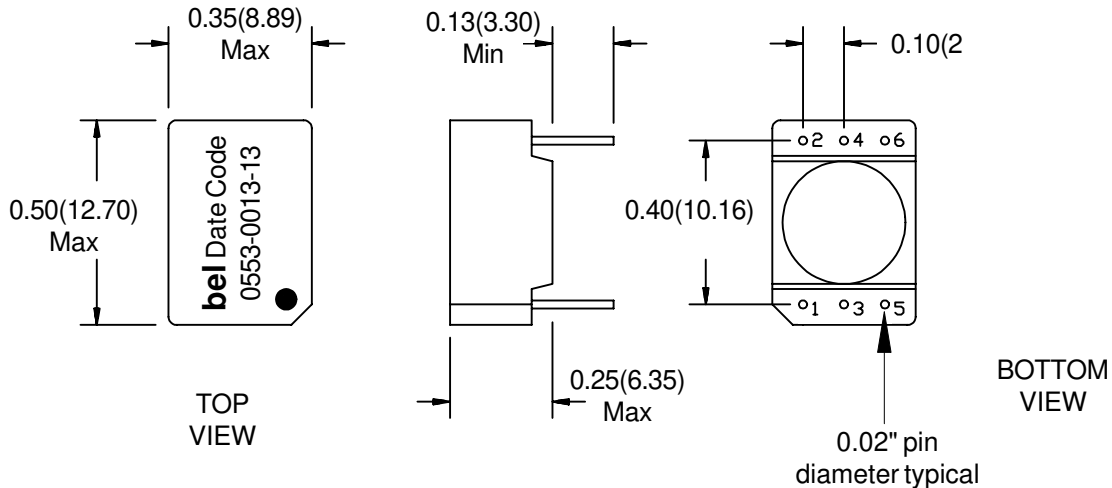
TM0017

Bel provides a new transformer to be used in multiple T1/CEPT/ISDN-Pri applications.

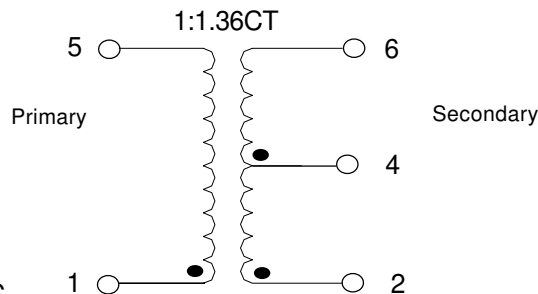
\* Primary Inductance is 1.2 mH minimum.

\* Isolation Voltage - 1500Vrms.

**M  
E  
C  
H  
A  
N  
I  
C  
A  
L  
S**



**SCHEMATIC**



Dimensions in inches(mm)  
 Dimension tolerance +/- 0.01(0.25) unless otherwise stated

**ELECTRICALS @ 25° C.**

Part Number	Primary Inductance OCL (mH) Min	Turns Ratio +/- 5%	Coupling Capacitance (pF) Max	Leakage Inductance L <sub>l</sub> (μH) Max	DCR (ohms) Max	
		Pins (1-5):(2-6)			Pins (1-5)	Pins (2-6)
0553-0013-13	1.20	1:1.36CT	35	0.80	0.7	0.9

**Corporate Office**  
 Bel Fuse Inc.  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: http://www.belfuse.com

**Far East Office**  
 Bel Fuse Ltd.  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

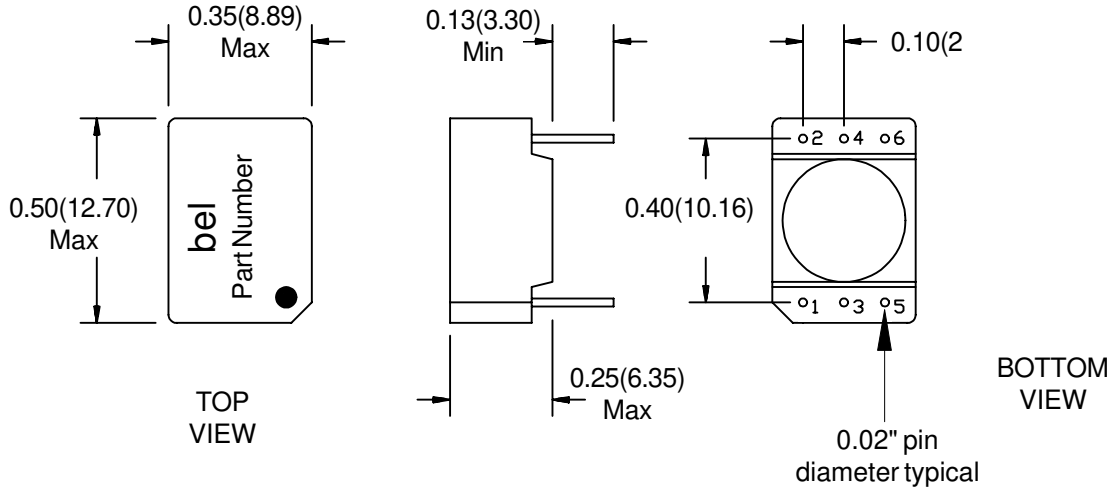
**European Office**  
 Bel Fuse Europe Ltd.  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366

**T1/CEPT/ISDN-PRI TRANSFORMER  
0553-0013-14**

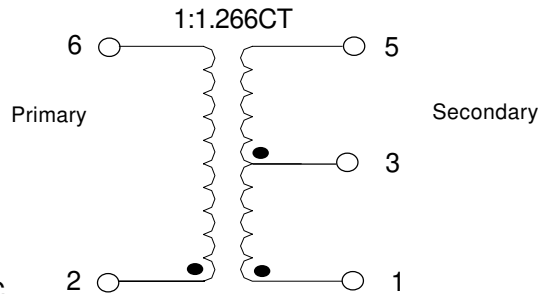
Bel provides a new transformer to be used in multiple T1/CEPT/ISDN-Pri applications.

- \* Primary Inductance is 1.5 mH minimum.
- \* Isolation Voltage - 1500Vrms.

**M  
E  
C  
H  
A  
N  
I  
C  
A  
L  
S**



**SCHEMATIC**



Dimensions in inches(mm)  
 Dimension tolerance +/- 0.01(0.25)  
 unless otherwise stated

**ELECTRICALS @ 25° C.**

Part Number	Primary Inductance OCL (mH) Min	Turns Ratio +/- 5% Pins (2-6):(1-5)	Coupling Capacitance (pF) Max	Leakage Inductance L <sub>L</sub> (μH) Max	DCR (ohms) Max	
					Pins (1-5)	Pins (2-6)
0553-0013-14	1.50	1:1.266CT	18	0.80	0.80	0.92

**Corporate Office**  
 Bel Fuse Inc.  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: http://www.belfuse.com

**Far East Office**  
 Bel Fuse Ltd.  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

**European Office**  
 Bel Fuse Europe Ltd.  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366

## ISDN TRANSFORMER 0554-3855-00

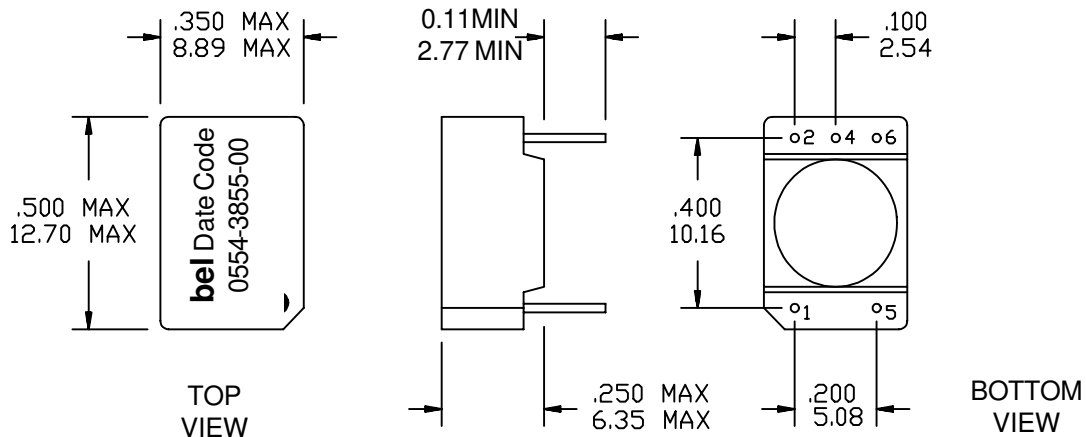
TM0019

Bel provides a new transformer.

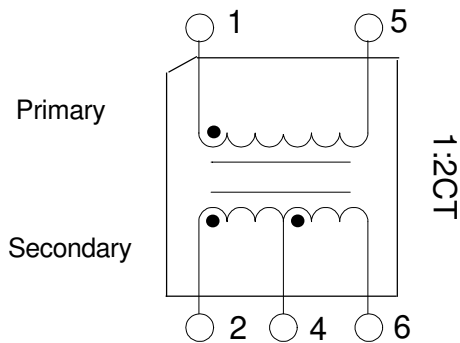
\* Primary Inductance is 19 $\mu$ H minimum.

\* Isolation Voltage - 3000Vrms.

MECHANICALS



### SCHEMATIC



Dimensions in  $\frac{\text{inches}}{\text{(mm)}}$   
Dimension tolerance +/- 0.01(0.25) unless otherwise stated

### ELECTRICALS

Part Number	Primary Inductance OCL ( $\mu$ H) Min	Turns Ratio	DCR ohms (max)	Leakage Inductance ( $\mu$ H) Max	Coupling Capacitance (pF) Max	Isolation Voltage (Vrms) 1 Min
	Pins (1-5)	Pins (1-5):(2-6)	Pins (1-5)=(2-4)=(4-6)			
0554-3855-00	19	1:2CT	0.20	60	60	3000

Electricals @ 25° C. Primary Inductance is measured at 20 mVrms @ 100 KHz.  
Leakage Inductance and Coupling Capacitance is measured at 100KHz, 10mVrms.

**Corporate Office**  
Bel Fuse Inc.  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: http://www.belfuse.com

**Far East Office**  
Bel Fuse Ltd.  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

**European Office**  
Bel Fuse Europe Ltd.  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366

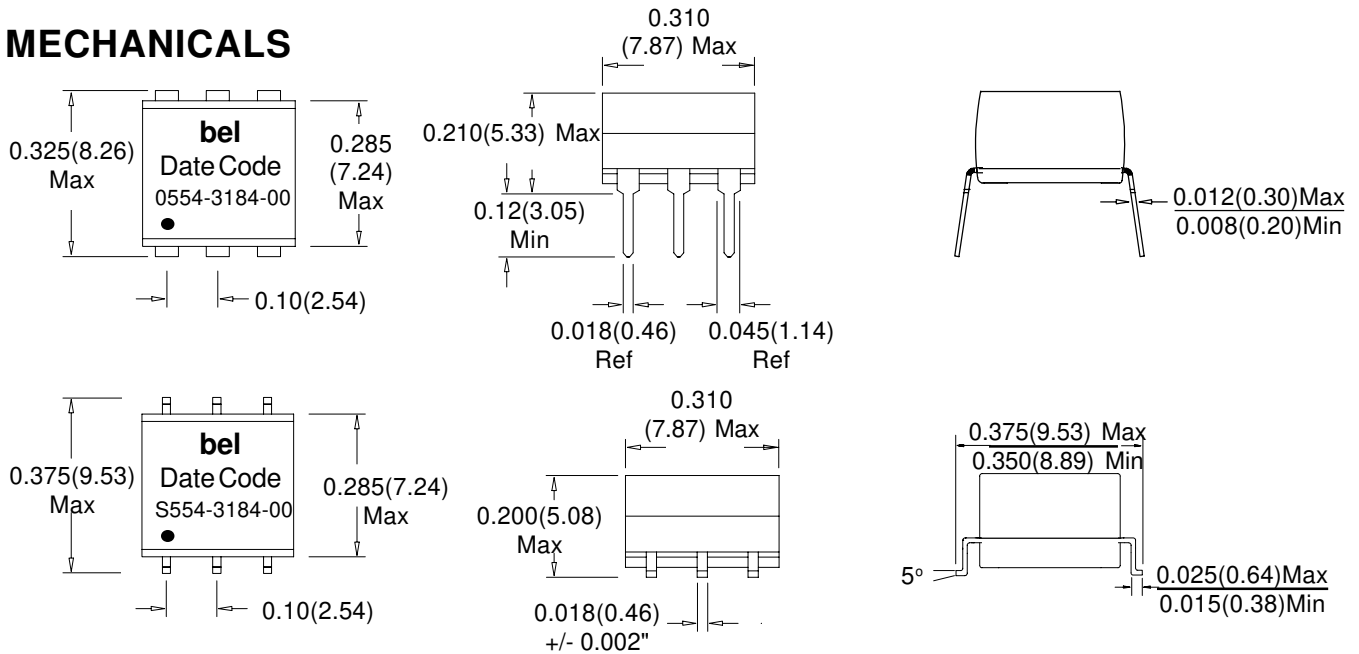
# T3/DS3/E3/STS-1 TRANSFORMERS

TM0020

Bel provides a small footprint transformer for use in multiple applications. It is available in both through hole and "pick and place compatible" SMD packaging.

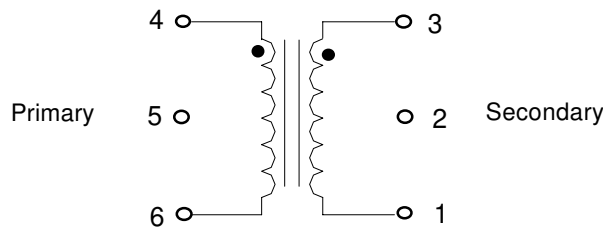
\* High Reliability and Low Cost

## MECHANICALS



Dimensions are in inches (mm).  
Dimension tolerance +/- 0.01(0.25) unless otherwise stated.

## SCHEMATIC



## ELECTRICALS @ 25° C

Part Number	Turns Ratio +/- 5%	Primary Pins	Inductance OCL (μH) Min	Leakage Inductance L <sub>L</sub> (μH) Max	Bandwidth (dB) Typ	Hipot (Vrms) @1 Sec
					200kHz-340MHz	
0554-3184-00	1:1	4-6	40	0.08	3	1500
S554-3184-00						

**Corporate Office**  
**Bel Fuse Inc.**  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: http://www.belfuse.com

**Far East Office**  
**Bel Fuse Ltd.**  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

**European Office**  
**Bel Fuse Europe Ltd.**  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366



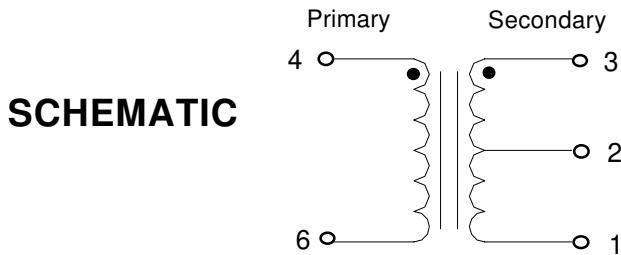
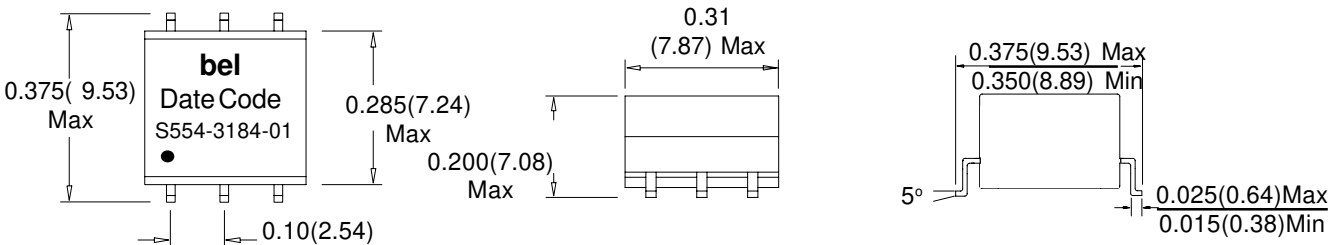
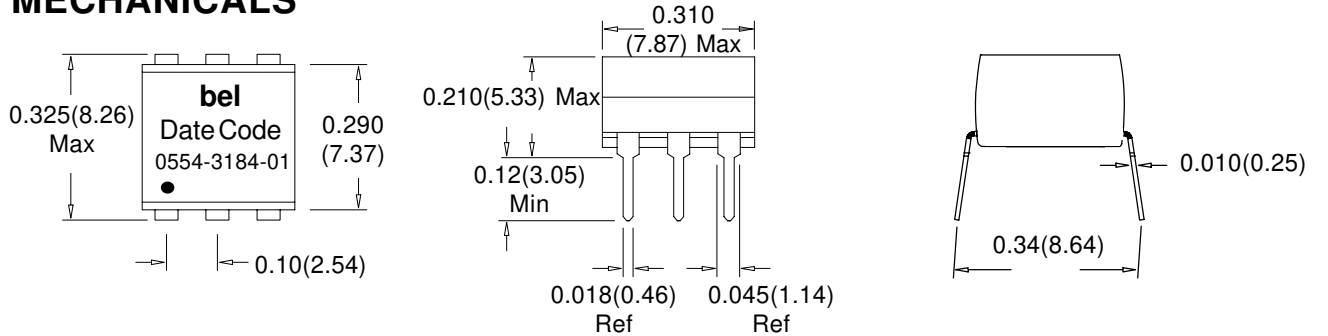
## DS3/T3/E3/STS-1 TRANSFORMERS 0554-3184-01 and S554-3184-01

TM0021

Bel introduces two new "pick and place" compatible, small footprint, transformers designed to be used in multiple applications.

- \* 1500 Vrms isolation
- \* High Reliability and Low Cost

### MECHANICALS



Dimensions are in inches (mm).  
Dimension tolerance +/- 0.01(0.25) unless otherwise stated.

### SCHEMATIC

### ELECTRICALS @ 25° C

Part Number	Turns Ratio +/- 5%	Inductance OCL (μH) Min	Leakage Inductance L <sub>L</sub> (μH) Max	Bandwidth (dB) Typ	Hipot (Vrms) @1 sec
				250kHz-500MHz	
0554-3184-01	1:2CT	19	0.06	3	1500
S554-3184-01	1:2CT	19	0.06	3	1500

**Corporate Office**  
**Bel Fuse Inc.**  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: http://www.belfuse.com

**Far East Office**  
**Bel Fuse Ltd.**  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

**European Office**  
**Bel Fuse Europe Ltd.**  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366

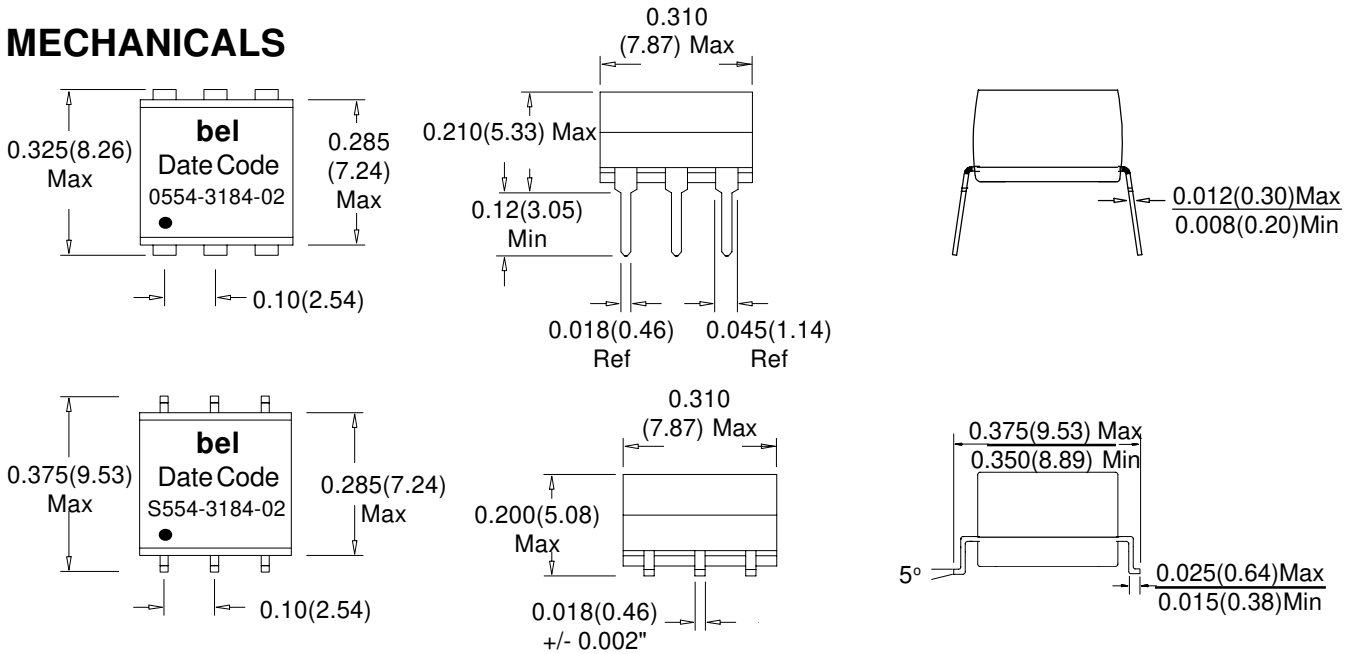
# ISDN TRANSFORMERS T3 Applications

TM0022

Bel provides a small footprint transformer for use in multiple applications. It is available in both through hole and "pick and place compatible" SMD packaging.

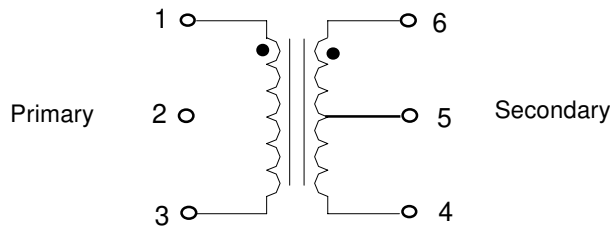
\* High Reliability and Low Cost

## MECHANICALS



Dimensions are in inches (mm).  
Dimension tolerance +/- 0.01(0.25) unless otherwise stated.

## SCHEMATIC



## ELECTRICALS @ 25° C

Part Number	Turns Ratio +/- 5%	Primary Pins	Inductance OCL (μH) Min	Leakage Inductance L <sub>L</sub> (μH) Max	DC Resistance DCR (ohms) Max		Interwinding Capacitance C <sub>ww</sub> (pF) Max	Hipot (Vrms) @1 Sec
					Pins (1-3)	Pins (4-6)		
0554-3184-02	1:2CT	1-3	40	0.12	0.2	0.3	10	1500
S554-3184-02								

**Corporate Office**  
**Bel Fuse Inc.**  
 198 Van Vorst Street, Jersey City, NJ 07302-4496  
 Tel: 201-432-0463  
 Fax: 201-432-9542  
 E-Mail: BelFuse@belfuse.com  
 Internet: http://www.belfuse.com

**Far East Office**  
**Bel Fuse Ltd.**  
 8F/8 Luk Hop Street  
 San Po Kong  
 Kowloon, Hong Kong  
 Tel: 852-2328-5515  
 Fax: 852-2352-3706

**European Office**  
**Bel Fuse Europe Ltd.**  
 Preston Technology Management Centre  
 Marsh Lane, Preston PR1 8UD  
 Lancashire, U.K.  
 Tel: 44-1772-556601  
 Fax: 44-1772-888366

## PULSE TRANSFORMERS S553-3855-01

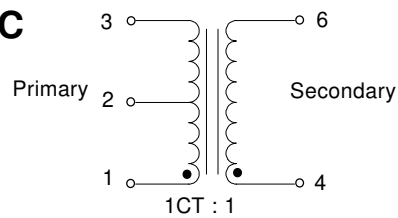
TM0023

Bel takes this opportunity to supply a new Pulse Transformer for Digital Data Service. Our manufacturing processes assure quality and reliability in every component.

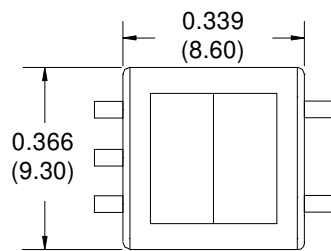
\* Designed to work compatibly with the Level One LXT441 Transceiver.

\* Designed for SW36 and DDS.

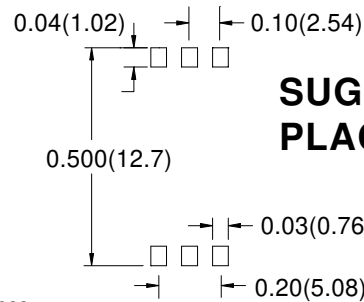
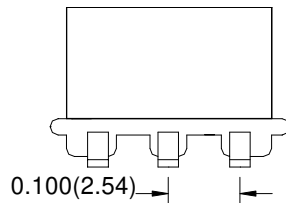
### SCHEMATIC



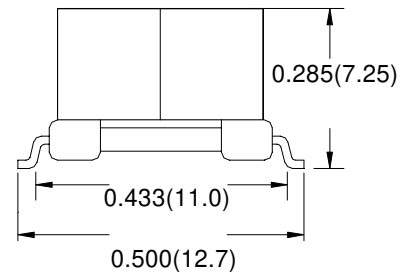
### MECHANICALS



All dimensions are in inches(mm). Dimension tolerance is +/- 0.01 unless otherwise stated.



### SUGGESTED PLACEMENT



### ELECTRICALS @ 25°C

Part Number	Turns Ratio +/- 2%	Primary Inductance (mH) Min	Leakage Inductance (µH) Max	Capacitance (pF) Max	DCR (ohms) +/- 10%	Return Loss (dB) Typ. vs. Line 2	Insertion Loss (dB) Typ.	Frequency Response (dB)
	Pins (3-1):(4-6)	Pins (3-1)	Pins (3-1)	Pins (3 to 4)	Pins (3-1) & Pins (4-6)	1kHz	10kHz	100Hz-112kHz
S553-3855-01	1CT:1	40	40	50	6	32	1.50	+/- 1.0

Part Number	Longitudinal Balance (dB) Typ.			DC Bias Current (mA) Min	Dielectric Strength (VAC)
	60Hz to 1000Hz	1000Hz to 4000Hz	15kHz to 2MHz		
S553-3855-01	60	40	40	50	1500

#### Corporate Office

**Bel Fuse Inc.**  
198 Van Vorst Street, Jersey City, NJ 07302-4496  
Tel: 201-432-0463  
Fax: 201-432-9542  
E-Mail: BelFuse@belfuse.com  
Internet: <http://www.belfuse.com>

#### Far East Office

**Bel Fuse Ltd.**  
8F/8 Luk Hop Street  
San Po Kong  
Kowloon, Hong Kong  
Tel: 852-2328-5515  
Fax: 852-2352-3706

#### European Office

**Bel Fuse Europe Ltd.**  
Preston Technology Management Centre  
Marsh Lane, Preston PR1 8UD  
Lancashire, U.K.  
Tel: 44-1772-556601  
Fax: 44-1772-888366