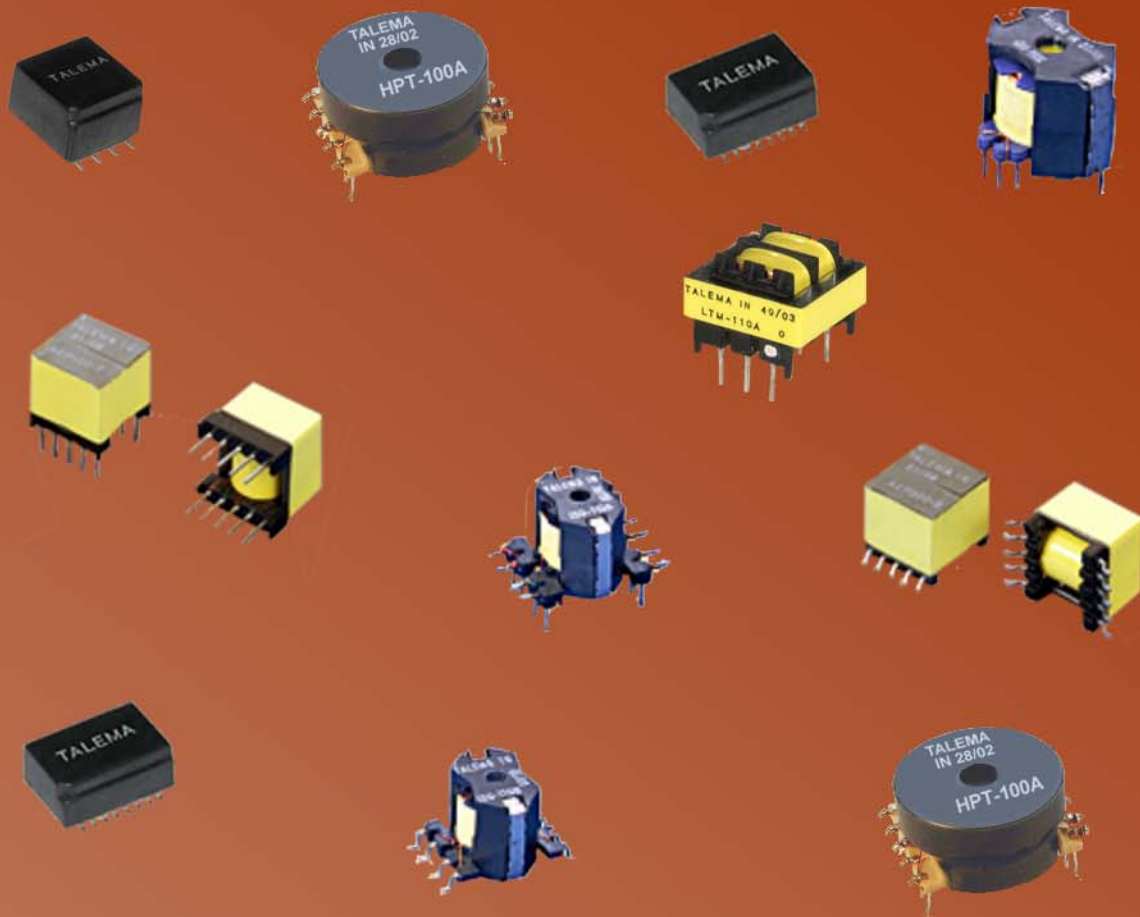


Transformers for Broadband Access



Transformers for Broadband Access

TALEMA PROFILE

Founded in 1975, The TALEMA International Group has established itself as a world leader in the Design & Manufacture of toroidal transformers and related magnetic components. Our strong technical engineering expertise has contributed to the growth of our current workforce to over 700 employees in manufacturing locations in the Czech Republic and India.

Over the years The Talema Group has succeeded in designing, producing and delivering in excess of 50 million transformers to its customers. The recent incorporation of xDSL technology into our extensive range of Telecom and LAN magnetics offerings, such as ISDN, Ethernet transformers for 10/100/1000Base-T, has broadened our market offering to an even higher level.

QUALITY

The TALEMA Group has a total commitment to quality and employs Lean Six Sigma training for engineering, production and administrative staff to help achieve a goal of zero defects. All facilities maintain very stringent Quality Control and Quality Assurance procedures and are certified to and manufacture in accordance with ISO 9001:2008, ISO/TS 16949:2009 and meet a broad range of International Standards including UL,

ENVIRONMENT

All TALEMA International Group manufacturing facilities are RoHS & REACH Compliant and all chokes, inductors and HF Components are produced in an Environment Management System (EMS) facility certified to ISO 14001:2004



CONTENTS

Page Nr.

Components for Broadband Access

SDSL/SHDSL

- EP-13 Transformers matched to Infineon ChipSets - 3-4

Modem Transformers

- LTM-110A - Line Interface 56kbps - 5-6

Tape & Reel Packing & Dimensions - 7-8

Regional Locations - Design, Manufacturing, Sales & Marketing - 9

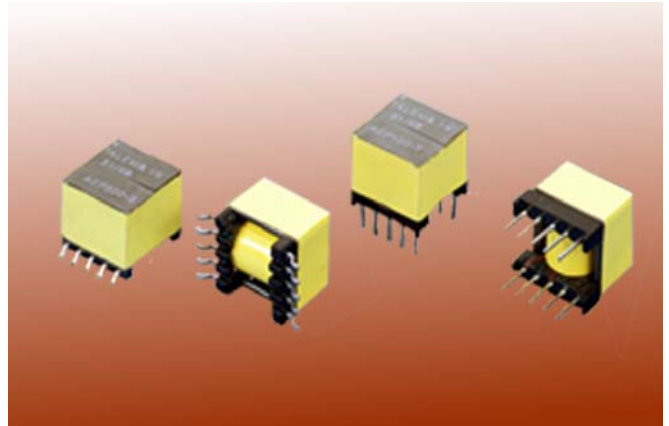
TALEMA Product Summary (Total Program) - 10

Visit our websites for detailed electrical and mechanical specifications for Talema's extensive line of magnetic components for Toroidal Transformers, Power Conversion, Telecom & LAN Applications:

www.talema.com
 www.nuvotem.com
 www.ntmagnetics.cz

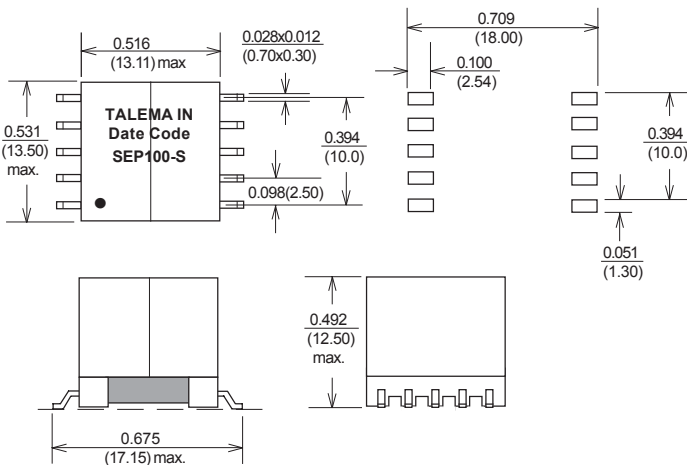
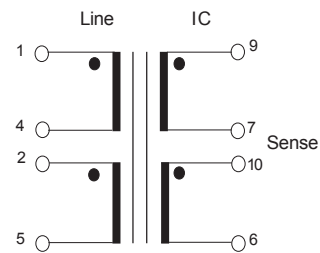
SEP Series • SDSL / SHDSL Transformers for Infineon Chipsets
Features

- Complies with ANSI and ETSI requirements
- Matched to Infineons PEB22622, PEF22623 & PEF24622 chipsets
- Very low THD
- 2000V minimum isolation
- All materials approved to UL94V-0
- Excellent quality at competitive price due to high volume production
- Manufactured in an ISO 9001:2008, ISO/TS 16949:2009 and ISO 14001:2004 approved Talema facility
- Fully RoHS & REACH Compliant and meets lead free reflow level J-STD-020C for SMD


Electrical Specifications @ 25°C

 Turns Ratio: **Bold** = IC side windings

Electrical Specifications @ 25°C • Operating Temperature -40° to +85°C							
Part Number	Package	Turns Ratio ±2% Line : IC:Sense	L _p (mH) ±10%	L _L (µH) Max.	DCR (Ohms Max.) Line / IC	DCR (Ohms Max.) Sense Winding	Isolation Voltage (Vrms)
SEP100-T	TH	3.2 : 1 : 1	3.0	25	5.0 / 0.80	3.6	2000
SEP100-S	SMD						

Package "S"

Schematic


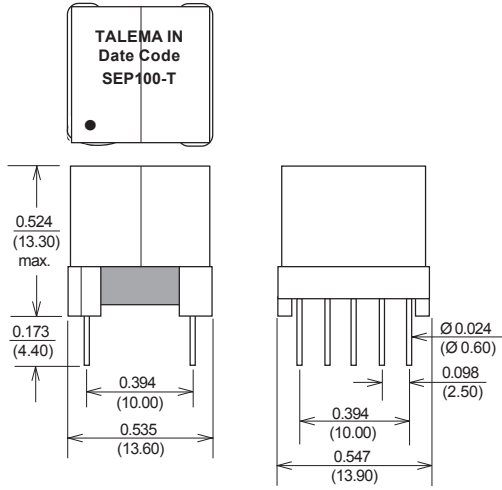
Dimensions: Inches (Millimeters)

Tolerance: ±0.010 (0.25) unless specified otherwise

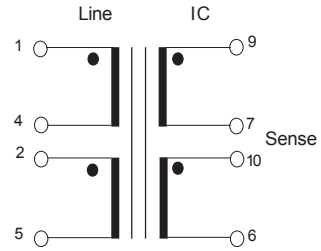
Surface Coplanarity will be 0.004 (0.10) maximum

Packing Method: Tape and Reel; Qty/Reel: 200 Pcs

Package "T"



Schematic



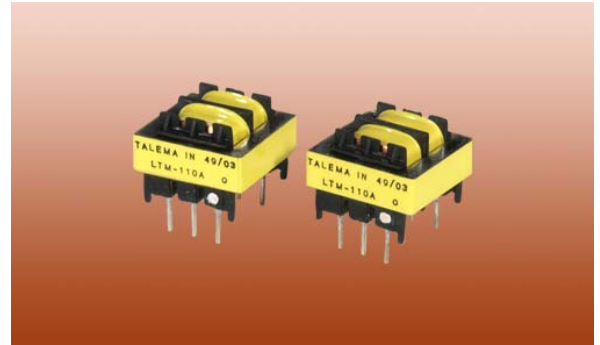
Dimensions: Inches (Millimeters)

Tolerance: ± 0.010 (0.25) unless specified otherwise

LTM-110A • Line Interface 56kbps Modem Transformer

Features

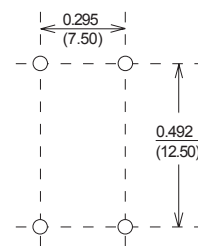
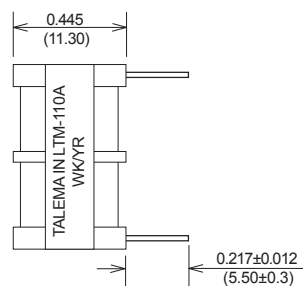
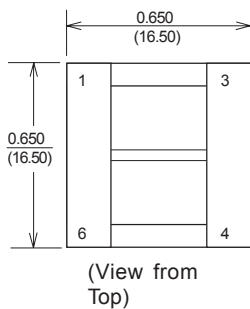
- Designed for V.90 applications (56kbps)
- Very low distortion
- Wide frequency range with flat response
- Meets IEC 60950 Supplementary Insulation levels, 1500V min.
- Excellent quality at competitive price due to high volume production
- Manufactured in an ISO 9001:2008, ISO/TS 16949:2009 and ISO 14001:2004 certified Talema facility
- Fully RoHS & REACH Compliant



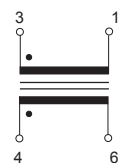
Electrical Specifications @ 25°C • Operating Temperature -40° to +85°C

Parameter	Conditions	Typical	Limit	Units
Frequency Response	200 - 4000Hz	±0.5	-	dB
Insertion Loss	2000Hz, RL600 Ohms	1.0	1.5 max	dB
Return Loss	200 - 4000Hz	22	18 min	dB
THD	150Hz, -3dBm	-70	-	dB
THD	200Hz, -10dBm	-85	-	dB
DC Resistance	per winding	70	±10%	Ohms
Inductance	1000Hz, 1V	6.0	-	H
Leakage Inductance	1000Hz, 1V	17	-	mH
Turns Ratio		1:1	±2%	-

Mechanical Dimensions & Pinout



Schematic

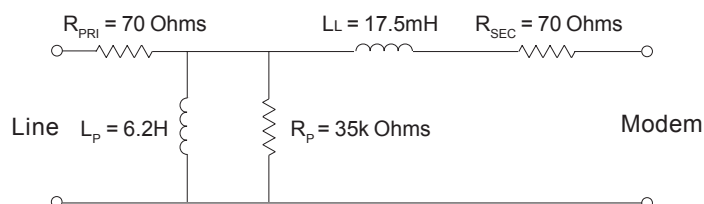


Dimensions are max. unless otherwise stated:

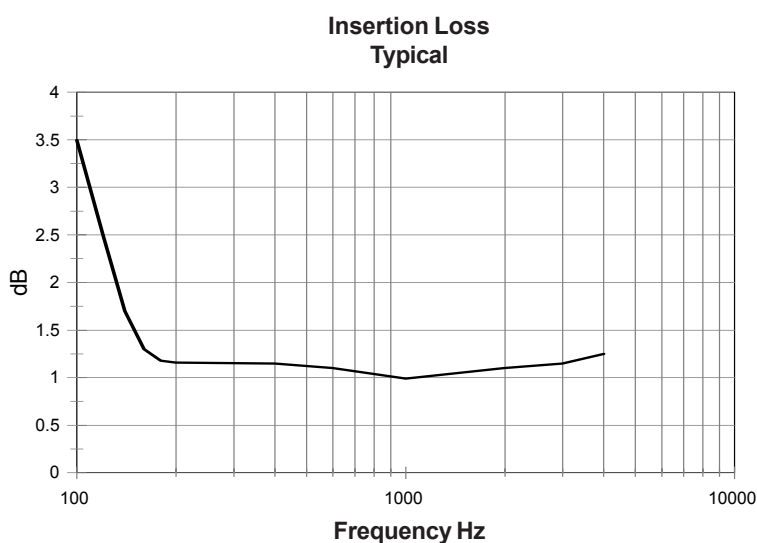
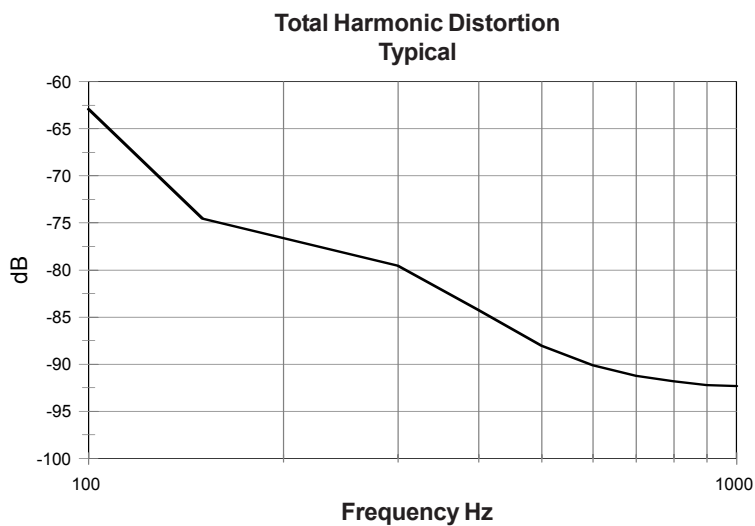
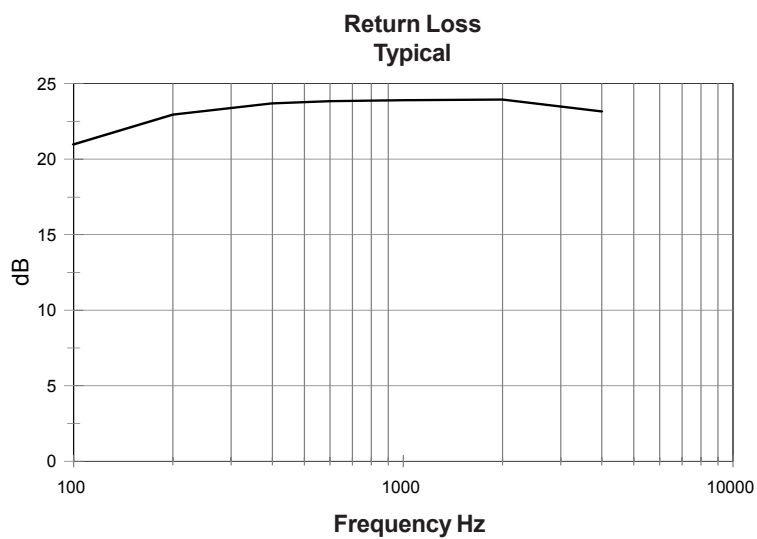
Inches(Millimeters)

Pinout spacings are nominal. Pins: 0.026 x 0.018 (0.66x0.45)

Equivalent Circuit: (Referenced to Primary @ 1V, 1kHz)



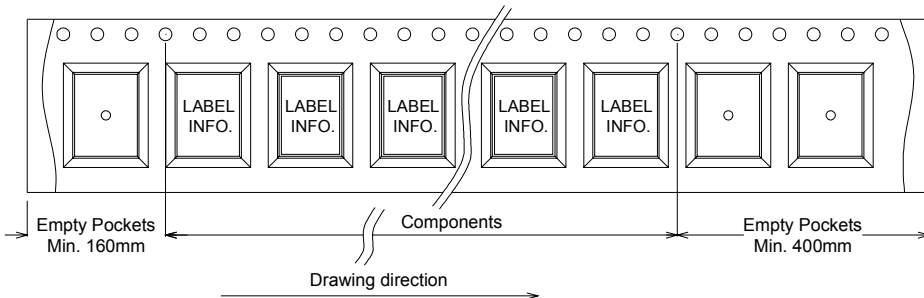
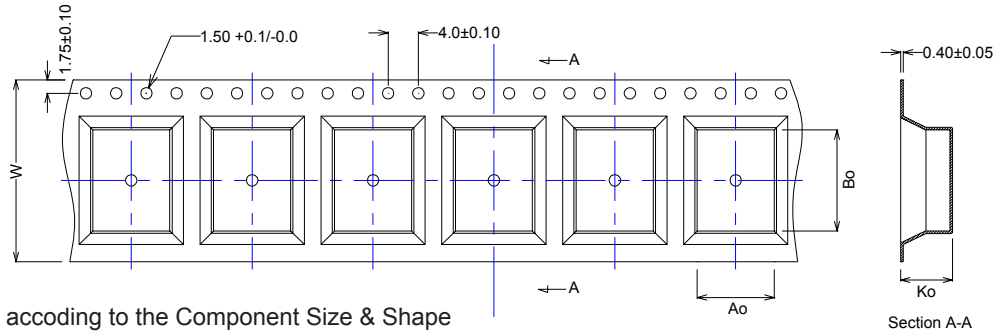
PERFORMANCE DATA



Tape & Reel Packing and Dimensions

Carrier Tape - 1

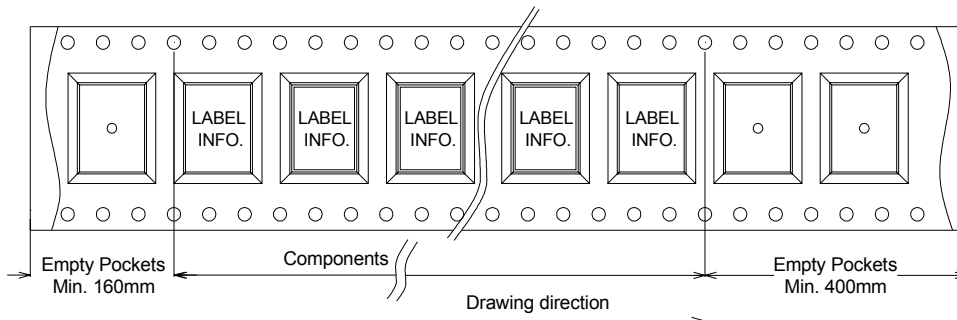
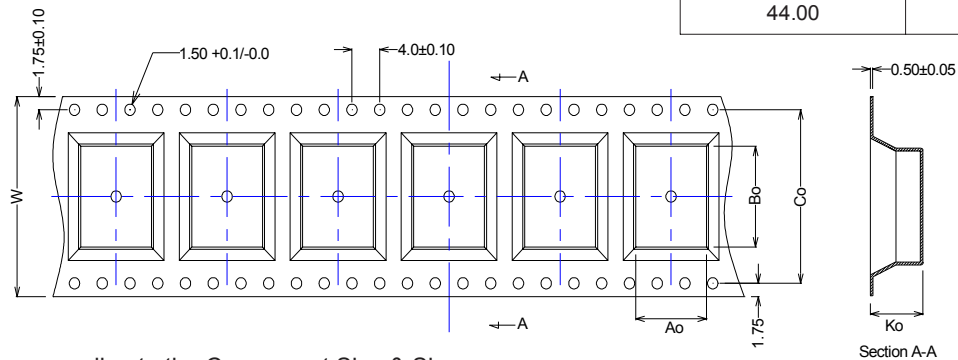
Carrier Tape Dimensions (12.00mm, 16.00mm & 24.00mm)



Carrier Tape - 2

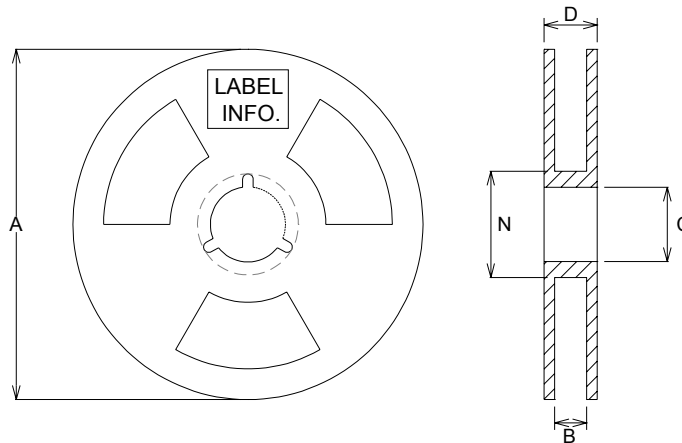
Carrier Tape Dimensions (32.00mm & 44.00mm)

Carrier Tape Dimensions in "mm"	
Width	Pitch (Co)
32.00	28.50
44.00	40.50



Tape & Reel Packing and Dimensions

Reel Drawing



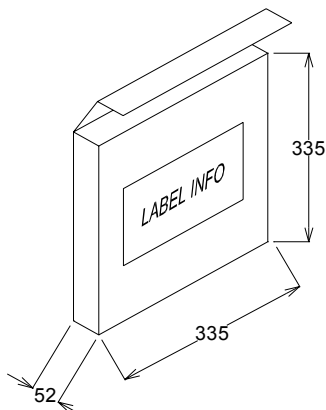
Reel Dimensions in "mm"

Type	A	B	C	D	N
13.00mm	Ø330	13	Ø20.2	17	Ø100
16.00mm	Ø330	16	Ø20.2	20	Ø100
24.00mm	Ø330	24	Ø20.2	28	Ø100
32.00mm	Ø330	32	Ø20.2	36	Ø100
44.00mm	Ø330	44	Ø20.2	48	Ø100

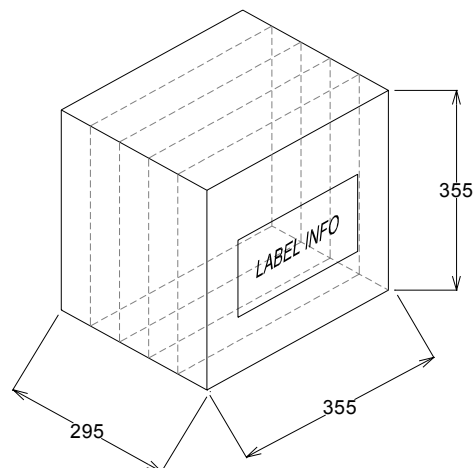
Tape & Reel Packing Details

Name of the Series	Reel Type	No. of Inside Carton	Quantity (Pcs/Reel)	Quantity (Reel/Cased)
SEP	32.00mm	5	200	5/200

Inside Carton



Outer Carton



Regional Locations - Design, Manufacturing, Sales & Marketing

Talema Group Regional Offices

North America

United States (Sales & Marketing)

Talema Group, LLC
 PO Box 935
 900 Innovation Drive
 Suite 120, Rolla
 Missouri 65402
 Tel: +1 573-303-3675
 E-Mail:
sales@talemagroup.com
 Web: www.talema.com

Asia

India (Design, Manufacturing, Sales & Marketing)

Administrative Office
Talema Electronic India Private Limited
 Door No. 221, 1st and 2nd Floor
 KJ Plaza, Opp.to Vidya Mandir School
 Meyanur Main Road
 Salem - 636 004 Tamil Nadu INDIA.
 Tel: +91 427 - 243 3100
 Fax: +91 427 - 243 3109
 E-Mail: talema@talemaindia.net
 Web: www.talema.com

Factory Premises
Talema Electronic India Private Limited
 No. 31 & 31, Electronic Industrial Estate
 Suramangalam Post
 Salem - 636 005 Tamil Nadu INDIA
 Tel: +91 427 - 243 3000
 E-Mail: talema@talemaindia.net
 Web: www.talema.com

Europe

Germany (Design, Sales & Marketing)

Talema Elektronik GmbH
 Sembdnerstr. 5
 82110 Germering
 Tel: +49 89 - 841 00 - 0
 Fax: +49 89 - 841 00 25
 E-Mail: info@talema.de
 Web: www.talema.com

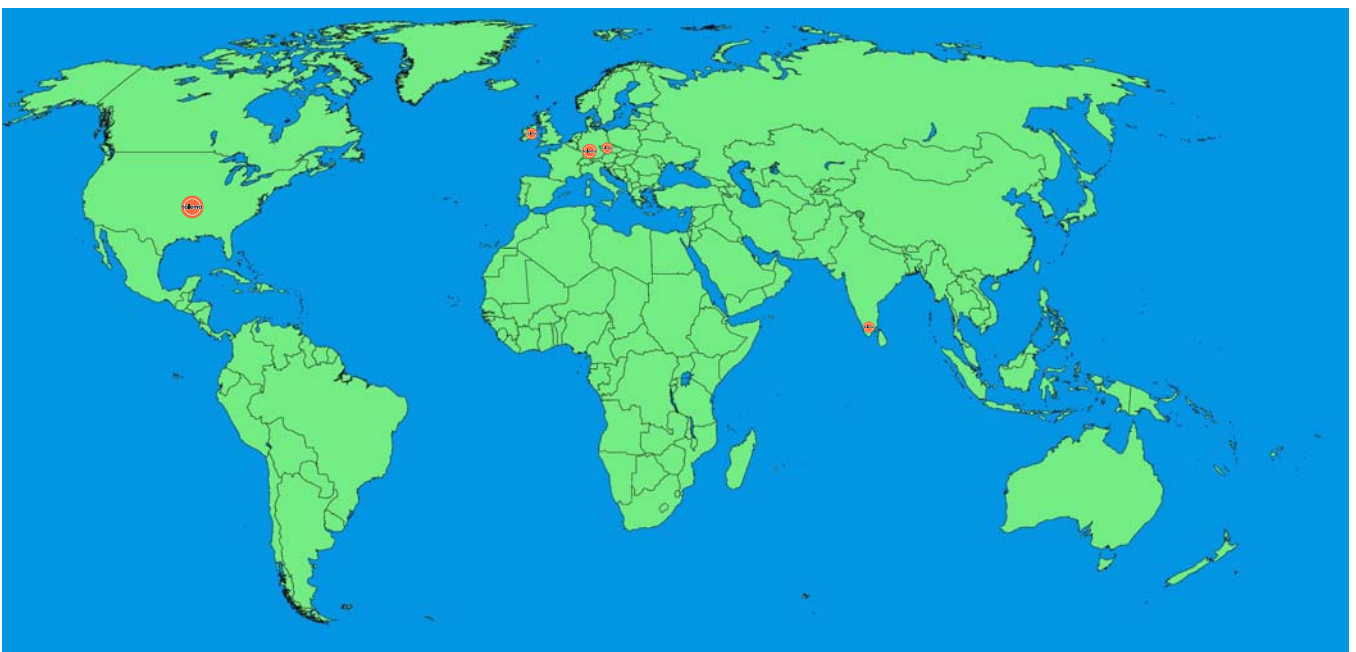
Ireland (Design, Sales & Marketing)

Nuvotem TEO
 Units W & X, Gweedore Business Park
 Derrybeg, Letterkenny, Co. Donegal
 Tel: +353 (0) 74 95 48666
 Fax: +353 (0) 74 95 48139
 E-Mail: info@nuvotem.com
 Web: www.nuvotem.com

Czech Republic (Design, Manufacturing, Sales & Marketing)

NT Magnetics s.r.o.
 Chebská 27
 322 00 Plzeň
 Tel: +420 377 - 338 351
 Fax: +420 377 - 338 350
 E-Mail: talema@talema.cz
 Web: www.ntmagnetics.cz

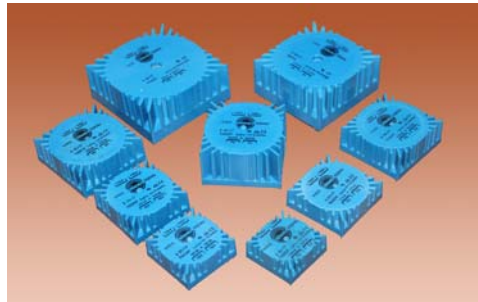
Locations of Talema Group Regional Offices



**Summary
TOTAL PROGRAM**

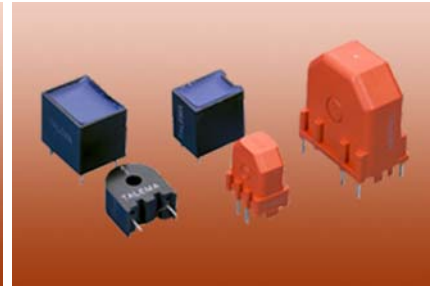
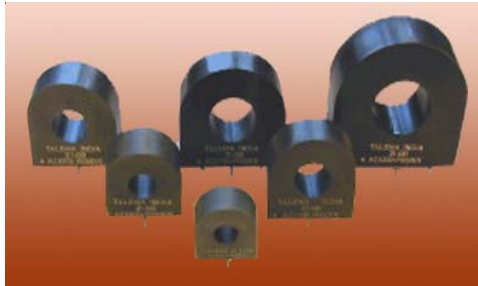
SECTION 1

- TOROIDAL 50/60Hz TRANSFORMERS,
TOROIDAL PCB TRANSFORMERS &
MEDICAL GRADE ISOLATION TRANSFORMERS



SECTION 2

- CURRENT SENSE TRANSFORMERS &
INDUCTORS



SECTION 3

- CHOKES, INDUCTORS AND TRANSFORMERS
FOR POWER APPLICATIONS



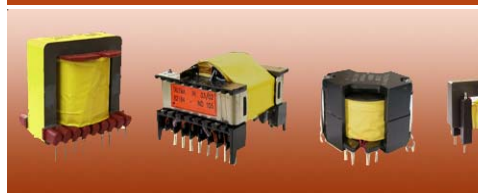
SECTION 4

- Transformers & Inductors FOR
SMPS MAGNETICS REQUIREMENTS



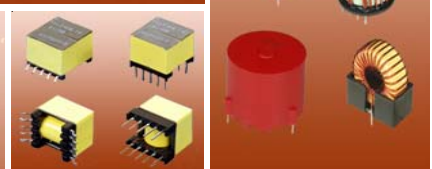
SECTION 5

- COMPONENTS FOR TELECOMMUNICATIONS
AND DATA LINE TECHNOLOGY



SECTION 6

- CURRENT COMPENSATED EMI NOISE
SUPPRESSION CHOKES



SECTION 7

- LAN MAGNETIC COMPONENTS FOR
ETHERNET APPLICATIONS



SECTION 8

- T1/E1/CEPT-PRI - T3/DS3/E3/STS-1 FOR
TELECOMMUNICATION PRODUCTS



SECTION 9

- TRANSFORMERS FOR BROADBAND ACCESS
AND FIBRE CHANNEL INTERFACE

SECTION 10

- THE TALEMA GROUP BROCHURE
OVERALL PRODUCTS - AN OVERVIEW

