

# LAN Components

## 10BASE-T LC Modules

### TLA-3M102/103

#### TLA-3M102

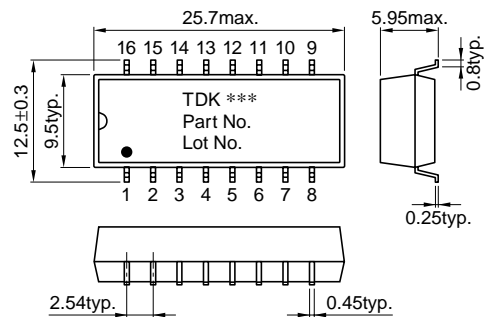
#### FEATURES

- Pulse transformer(Turns ratio TX=1CT:1CT, RX=1CT:1CT), common-mode choke, low pass filter and R-net are integrated into 16-pin SOP package.
- Excellent C.M.R.R. and filtering for EMI.
- Suitable for use with AMD's Am79C961A, 970A, 981, 940.
- Tape and reel packaging are available(TLA-3M102-T: Tape and reel, TLA-3M102: Bulk).
- ISO9001/QS9000 quality standards certification.

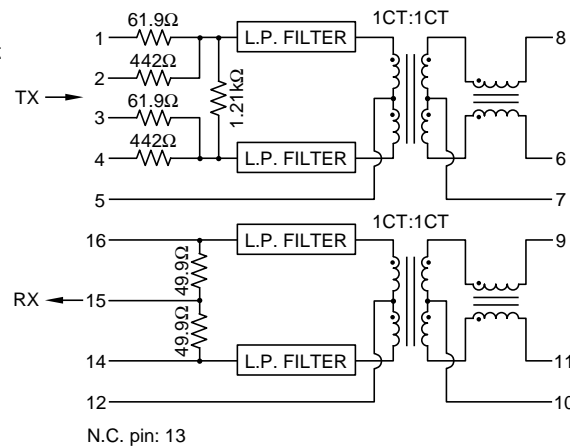
#### GENERAL SPECIFICATIONS

Low pass filter	2
Pulse transformer	2
Common-mode choke	2
Resistor	7
Port	1
Operating temperature range	0 to +70°C
Storage temperature range	-40 to +85°C
Withstanding voltage	Erms:1500V[60s]

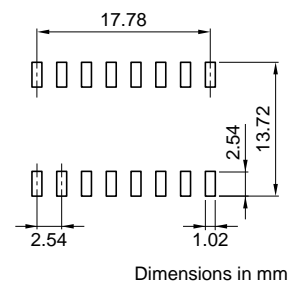
#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



\*\*\*: Country of origin  
Dimensions in mm



#### RECOMMENDED PC BOARD PATTERN



Dimensions in mm



#### ELECTRICAL CHARACTERISTICS

Part No.	Insertion loss (dB)max.[5 to 10MHz]	Attenuation (dB)min.[30 to 100MHz]	Impedance (Ω)typ.[5 to 10MHz]	C.M.R.R. (dB)min.[1 to 100MHz]
	1,2,3,4-8,6	1,2,3,4-8,6	8-6	1,2,3,4-8,6
	9,11-16,14	9,11-16,14	9-11	16,14-9,11
TLA-3M102(-T)	2	25	-	25
	1	25	100	25

- Ta=25°C

# LAN Components

## 10BASE-T

### LC Modules

## TLA-3M102/103

### TLA-3M103

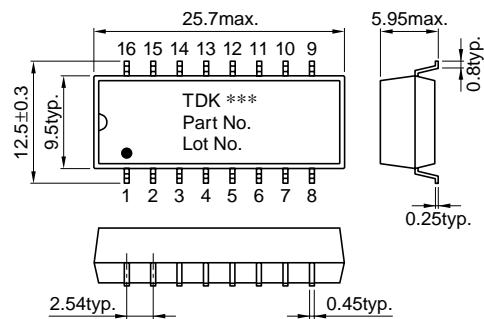
#### FEATURES

- Pulse transformer (Turns ratio TX=1CT:1CT, RX=1CT:1CT), common-mode choke and low pass filter are integrated into 16-pin SOP package.
- Excellent C.M.R.R. and filtering for EMI.
- Suitable for use with most 10BASE-T transceiver chips.
- Tape and reel packaging are available (TLA-3M103-T: Tape and reel, TLA-3M103: Bulk).
- ISO9001/QS9000 quality standards certification.

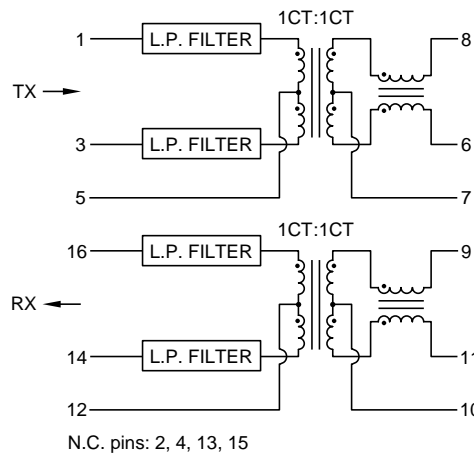
#### GENERAL SPECIFICATIONS

Low pass filter	2
Pulse transformer	2
Common-mode choke	2
Port	1
Operating temperature range	0 to +70°C
Storage temperature range	-40 to +85°C
Withstanding voltage	Erms:1500V[60s]

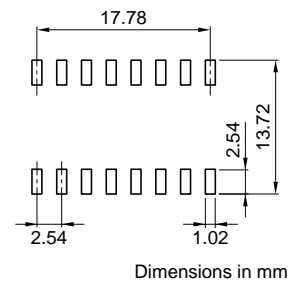
#### SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



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Dimensions in mm



#### RECOMMENDED PC BOARD PATTERN



#### ELECTRICAL CHARACTERISTICS

Part No.	Insertion loss (dB)max.[5 to 10MHz]	Attenuation (dB)min.[30 to 100MHz]	Impedance ( $\Omega$ )typ.[5 to 10MHz]	C.M.R.R. (dB)min.[1 to 100MHz]
	1,3-8,6	1,3-8,6	1-3, 8-6	1,3-8,6
	9,11-16,14	9,11-16,14	16-14, 9-11	16,14-9,11
TLA-3M103(-T)	1	25	100, 100	25
	1	25	100, 100	25

- Ta=25°C

# LAN Components

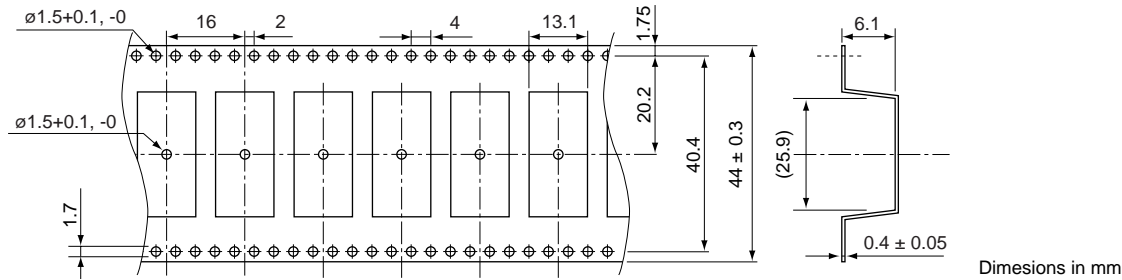
## 10BASE-T LC Modules

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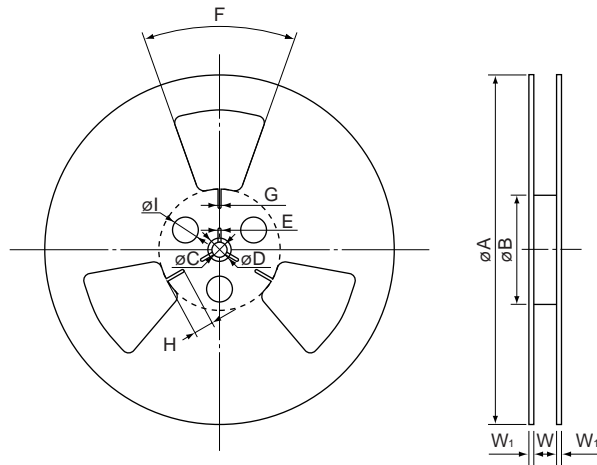
#### PACKAGING STYLES

Quantity : 600pieces/reel

#### TAPE DIMENSIONS



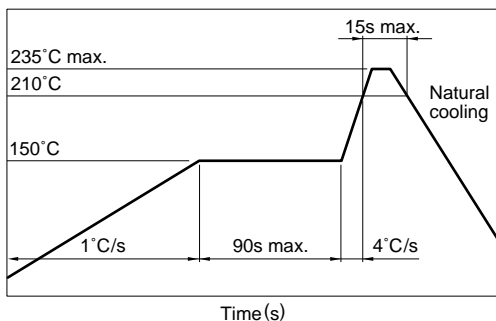
#### REEL DIMENSIONS



Dimensions in mm

A	B	C	D	E	F	G	H	I	W	W <sub>1</sub>
$\phi 330+0, -2$	$\phi 100+1, -0$	$\phi 13.5 \pm 0.2$	$\phi 21 \pm 0.8$	$2 \pm 0.5$	3-40°	$2.5 \pm 0.3$	$12 \pm 0.3$	$3-\phi 22 \pm 0.3$	$45.5 \pm 0.5$	2

#### RECOMMENDED SOLDERING CONDITION REFLOW SOLDERING



- Temperature is measured on the top of products body(Using thermocoupler for measurement).
- This profile is reference data we recommend. Please check in your actual process.

#### LONG TERM STORING CONDITION FOR TRANSFER MOLDED PRODUCTS WITH DRY PACKAGE

Each tape and reel is packaged by Anti-humid Al bag, in order to keep a good solder ability condition and soldering heat-resistant for the products.

- Unless open the bag, the limit of storing is within 2 years.
- After opening the bag, the products should be soldered within 2 weeks.

The products should be stored in the atmosphere of +5 to +30°C and below 60% R.H.