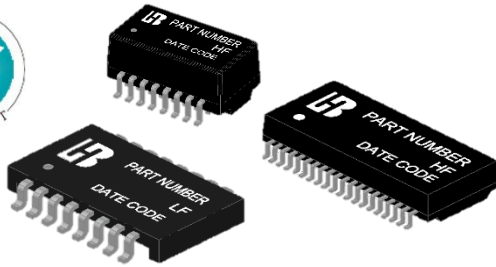






# 100BASE-TX Magnetic Modules

TSxx , NS00xx, 40SSxx



-  Complying with IEEE 802.3u standard
-  Compatible with all Major PHYs
-  RoHS compliant and Halogen Free
-  PCMCIA Options

Electrical Specification @ 25° (OCL@DC8mA)									
PART NUMBER	Media side Inductance (@100KHz/0.1Ve) uH min	Insertion Loss dB max	Return Loss dB min			PoE (Current Per Pair mA)	Operating Temperature (°C)	Isolation (Pri:Sec)	Note
			0.3-100 MHz	2-30MHz	30-60MHz				
TS8121A HF	350	-1.1	-16	$-(16-20\log_{10}(f/30))$	-10	-	0 to +70	1500Vrms	-
TS8121AM HF	350	-1.1	-16	$-(16-20\log_{10}(f/30))$	-10	720	-40 to +85	1500Vrms	PoE+
TS8121CM HF	350	-1.1	-16	$-(16-20\log_{10}(f/30))$	-10	350	-40 to +85	1500Vrms	PoE
TS21C HF	350	-1.1	-16	$-(16-20\log_{10}(f/30))$	-10	-	0 to +70	1500Vrms	-
TS21AZ HF	350	-1.1	-16	$-(16-20\log_{10}(f/30))$	-10	720	0 to +70	1500Vrms	PoE+
40SS1041AX HF	350	-1.15	-16	$-(16-20\log_{10}(f/30))$	-10	-	0 to +70	1500Vrms	-

Electrical Specification @ 25°C									
PART NUMBER	Media side Inductance (@100KHz/0.1Ve) uH min	Insertion Loss dB max	Return Loss dB min			PoE (Current Per Pair mA)	Operating Temperature (°C)	Isolation (Pri:Sec)	Note
			0.3-100 MHz	2-30MHz	30-60MHz				
NS0015 LF	350	-1.1	-16	$-(16-20\log_{10}(f/30))$	-10	-	0 to +70	1500Vrms	-
NS0013 LF	350	-1.1	-16	$-(16-20\log_{10}(f/30))$	-10	-	0 to +70	1500Vrms	-

Note: Refer to the specification for detail

## Process and Materials

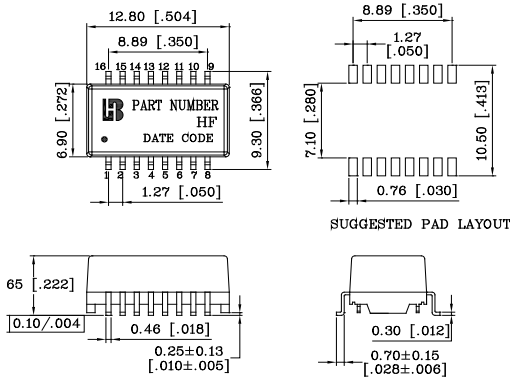
1. Storage Temperature: Refer to the specification for details
2. Compliance to J-STD:
  - A. J-STD-002: Solderability at 245 °C Reflow Profile
  - B. J-STD-020: Moisture Sensitive Level 1
  - C. J-STD-075: R7, 245 °C Maximum Through Reflow Solder
3. All parts come in 13" (330mm) Diameter Tape and reel I - see page 4-5 for details
4. Header: DAP (Diallyl Phthalate) with flammability Rating UL 94V-0 or better
5. Lead Frame: Cooper Alloy
  - Underplated: Half Hard Ductile Nickel 40-118" (1.0 -3.0um)
  - Over plated: 100% Tin electro-deposited per 240~400u"Min(6~10um)
  - Finish: Matte finish 100% Tin solder

# 100BASE-TX Magnetic Modules

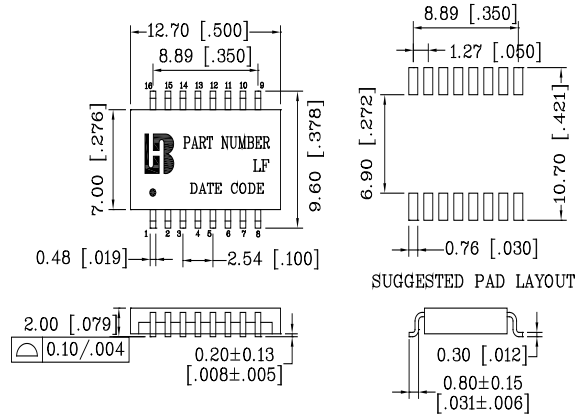
TSxx, NS00xx, 40SSxx

## Mechanical

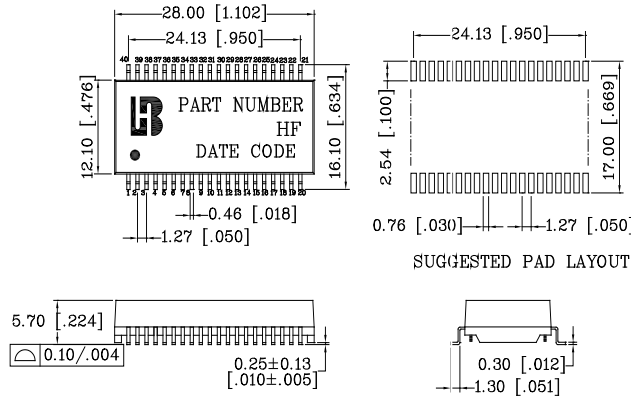
### TS21xx, TS81xx



### NS00xx



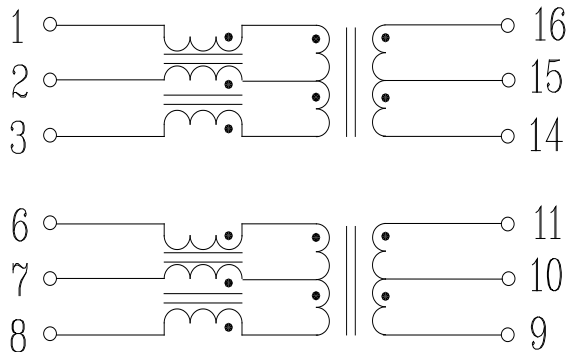
### 40SSxx



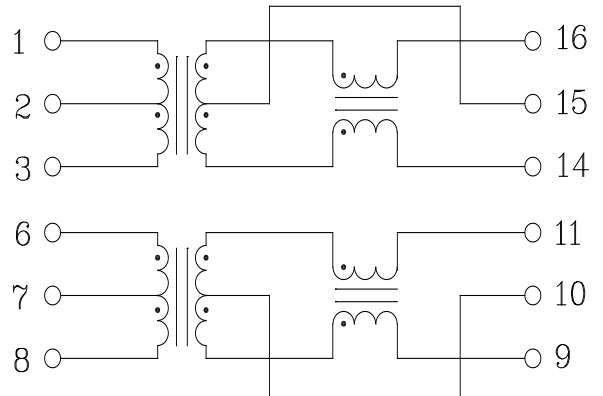
Dimensions: mm / [Inches]  
Unless otherwise specified, all tolerances are:  
xx.xx ±0.25 [.010]  
0.xx ±0.05 [.004]

## Schematic

### TS21AZ HF



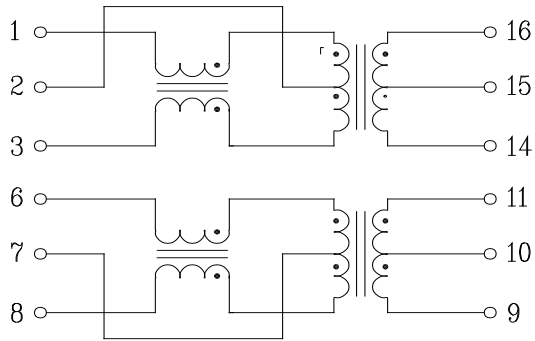
### TS21C HF, TS8121CM HF



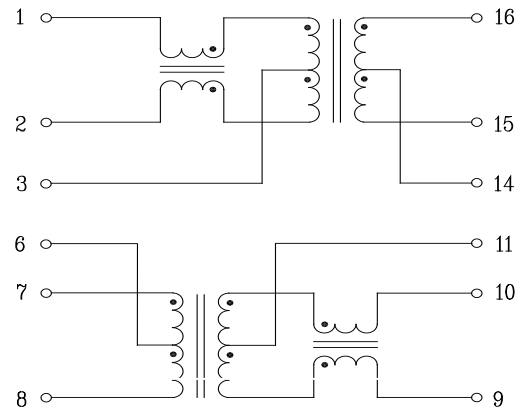
# 100BASE-TX Magnetic Modules

TSxx , NS00xx, 40SSxx

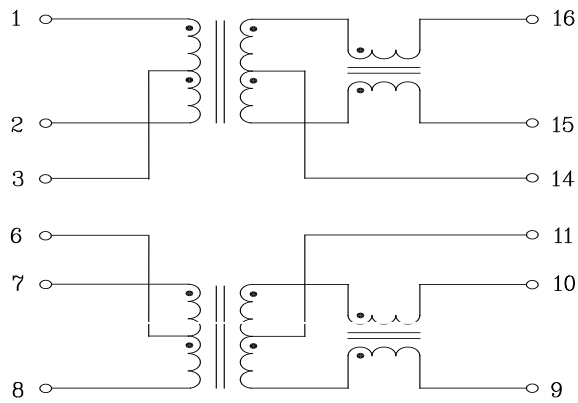
## TS8121A HF ,TS8121AM HF



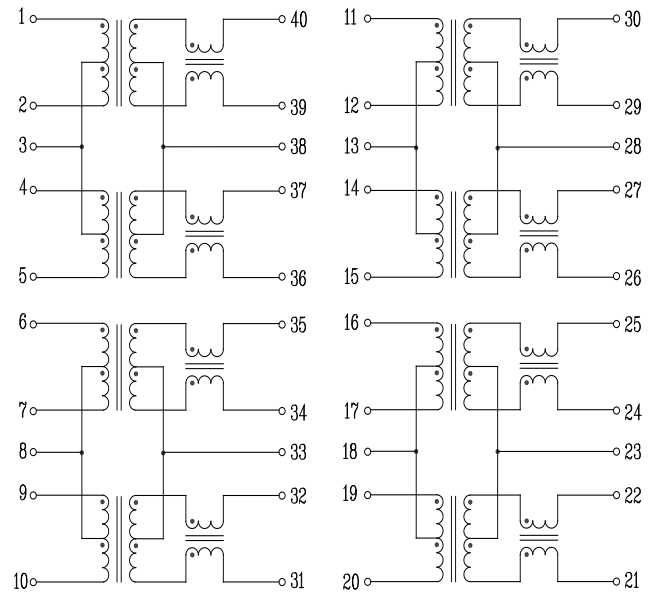
## NS0013 LF



## NS0015 LF



## 40SS1041AX HF

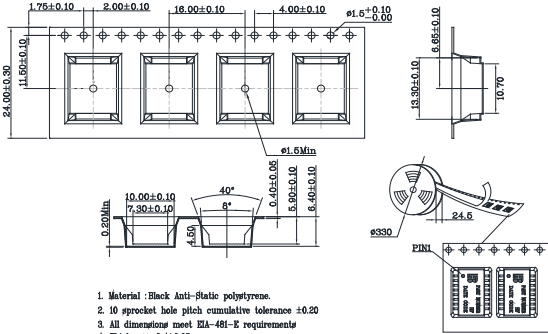


# 100 BASE –T Magnetic Modules

TSxx, NS00xx, 40SSxx

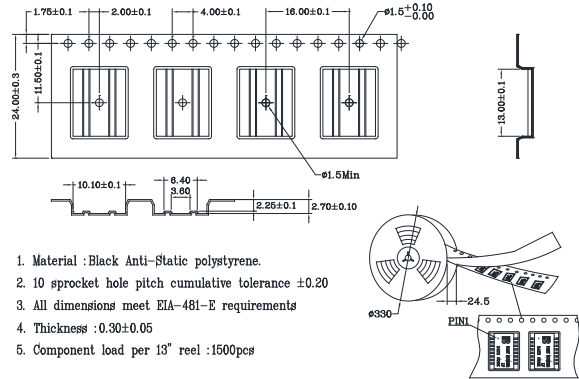
## Tape & Reel

### TS21xx, TS81xx



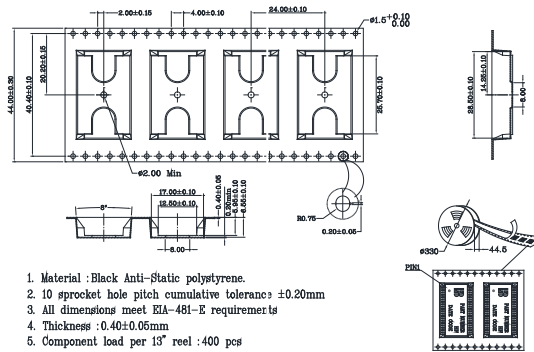
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ±0.20
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.4±0.05mm
5. Component load per 13" reel : 800 pcs

### NS00xx



1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ±0.20
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.30±0.05
5. Component load per 13" reel : 1500pcs

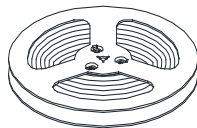
### 40SSxx



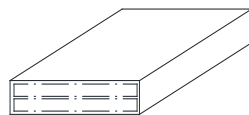
1. Material : Black Anti-Static polystyrene.
2. 10 sprocket hole pitch cumulative tolerance ±0.20mm
3. All dimensions meet EIA-481-E requirements
4. Thickness : 0.40±0.05mm
5. Component load per 13" reel : 400 pcs

## Carton Package

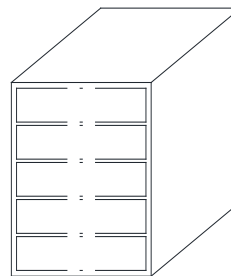
### TSxx



REEL



INNER BOX: 347x347x82



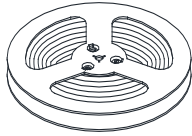
OUTER CARTON: 375x375x470

1. 1 REEL=600PCS
2. 1 INNER BOX=2 REELS=1200PCS
3. 1 OUTER CARTON=5 INNER BOXES=6000PCS

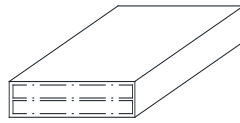
# 100 BASE –T Magnetic Modules

TSxx , NS00xx, 40SSxx

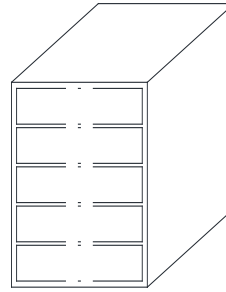
## NS00xx



REEL



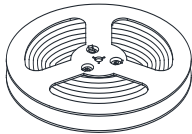
INNER BOX: 347x347x82



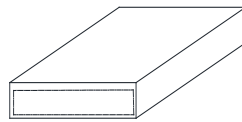
OUTER CARTON: 375x375x470

1. 1 REEL=1500PCS
2. 1 INNER BOX=2 REELS=3000PCS
3. 1 OUTER CARTON=5 INNER BOXES=15000PCS

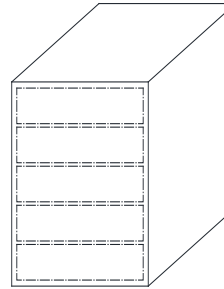
## 40SSxx



REEL



INNER BOX: 347x347x82



OUTER CARTON: 375x375x470

1. 1 REEL=400PCS
2. 1 INNER BOX=1 REEL=400PCS
3. 1 OUTER CARTON=5 INNER BOXES=2000PCS

### For More Information:

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