



## 10/100/1000Base-T Single Port Transformer Module

P/N: NS892402

- ★ Designed to meet IEEE802.3ab requirement
- ★ Lead-Free & Designed to meet RoHS requirement
- ★ Designed to meet IR 255°C peak Requirement.
- ★ Primary inductance 350μH min. with 8mA DC Bias
- ★ Single Port for NIC Application
- ★ Operating temperature range: 0°C to +70°C
- ★ Storage temperature range: 0°C to +85°C

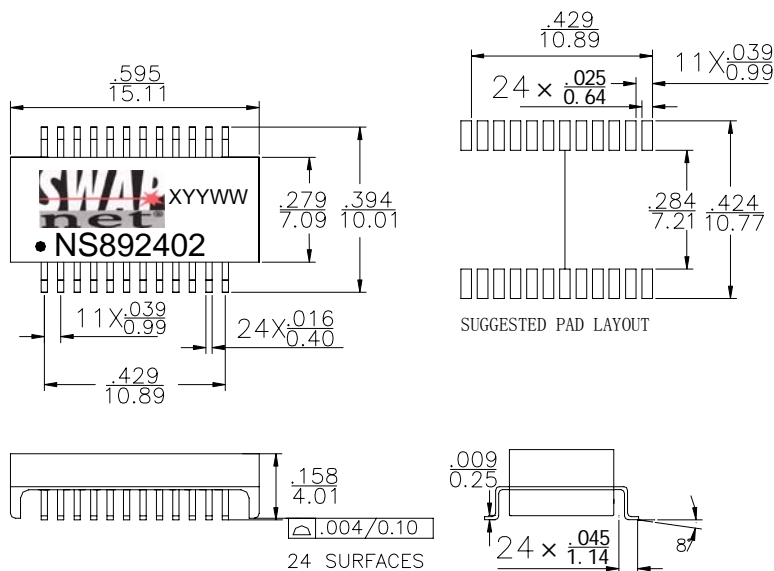
### Electrical Specifications @25°C

Part Number	Turn Ratio	L.L (uH Max)	DCR (Ω Max)	Insertion Loss 1~100MHz (dB Max)	Return Loss (dB Min)				
					1-30MHz	40MHz	50MHz	60-80MHz	100MHZ
NS892402	1CT:1CT	0.4	1.2	-1.0	-18.0	-14.4	-13.1	-12.0	-10.0

### Continue

Cross Talk (dB Min)			DCMR (dB Min)			Hi-Pot (Vrms Min)
30MHz	60MHz	80-100MHZ	30MHz	60MHz	100MHZ	
-45.0	-40.0	-35.0	-43.0	-37.0	-33.0	1500

### Mechanical



Dimensions: Inches/mm

Unless otherwise specified, tolerances: xx.x0 ± 0.25(mm)

0.xx ± 0.05(mm)

Data sheet subject to change without notice

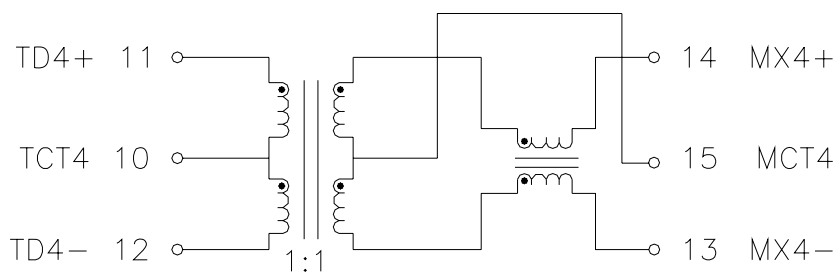
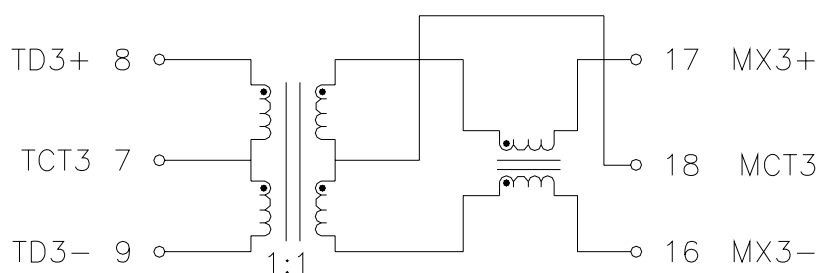
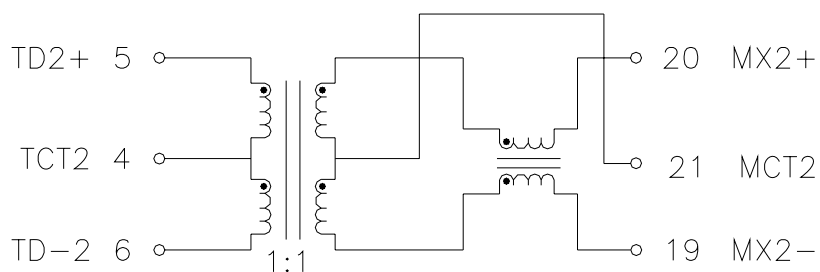
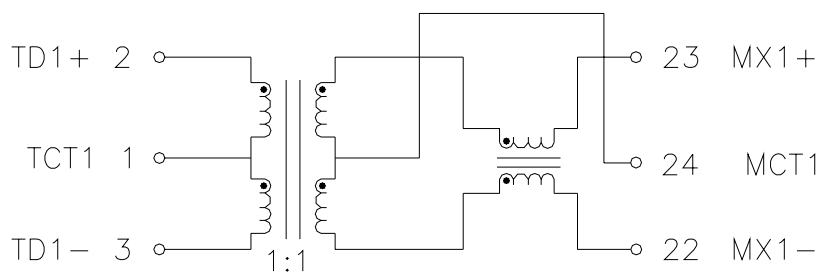
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Overseas Operation Office:

Hong Kong Shanghai Shenzhen

## Schematics



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P/N: NS892402

Part Number: NS892402

## DESCRIPTION: TRANSFORMER

ITEM	TEST CONDITION@25 ℃	SAMPLE NO。 TEST PIN	1	2	3	4	5	SPECIFICATION		
OCL ( uH )	100KHz/0.1Vrms/ 8mA DC	(2,3)	468	436	452	486	462	Min 350	Typ	Max
		(5,6)	469	485	425	446	478			
		(8,9)	485	467	435	468	476			
		(11,12)	452	478	477	458	495			
DCR ( Ω )		(2,3)	0.566	0.536	0.552	0.538	0.526	Min	Typ	Max 1.2
		(5,6)	0.556	0.557	0.568	0.552	0.554			
		(8,9)	0.552	0.553	0.561	0.548	0.572			
		(11,12)	0.516	0.524	0.554	0.536	0.542			
DCR ( Ω )		(13,14)	0.902	0.915	0.936	0.918	0.925	Min	Typ	Max 1.2
		(16,17)	0.925	0.926	0.917	0.916	0.922			
		(19,20)	0.935	0.915	0.926	0.908	0.914			
		(22,23)	0.926	0.908	0.926	0.914	0.913			
LL ( uH )	100KHz/0.1Vrms	(2,3)short(22,23)	0.22	0.23	0.23	0.24	0.22	Min	Typ	Max 0.4
		(5,6) short(19,20)	0.25	0.22	0.23	0.24	0.23			
		(8,9) short(16,17)	0.23	0.23	0.22	0.24	0.22			
		(11,12)short(13,14)	0.23	0.25	0.24	0.24	0.23			
HI-POT (Vrms)	1500 Vrms	PRI/SEC	PASS	PASS	PASS	PASS	PASS	1MIN		
TURN RATIO (±3%)	100KHz/0.1Vrms	PRI/SEC	PASS	PASS	PASS	PASS	PASS	1CT:1CT		
Cross Talk (dB Min)	30MHz	TX to RX	PASS	PASS	PASS	PASS	PASS	-45		
	60MHz		PASS	PASS	PASS	PASS	PASS	-40		
	100MHz		PASS	PASS	PASS	PASS	PASS	-35		
Return loss (dB Min)	1-30MHz	TX & RX	PASS	PASS	PASS	PASS	PASS	-18		
	40MHz		PASS	PASS	PASS	PASS	PASS	-14.4		
	50MHz		PASS	PASS	PASS	PASS	PASS	-13.1		
	60-80MHz		PASS	PASS	PASS	PASS	PASS	-12		
	100MHz		PASS	PASS	PASS	PASS	PASS	-10		

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<b>DCMR</b> (dB Min)	<b>30MHz</b>	<b>TX &amp; RX</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>-43</b>
	<b>60MHz</b>		<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>-37</b>
	<b>100MHz</b>		<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>-33</b>
<b>Insertion loss (dB Max)</b>	<b>1-100MHz</b>	<b>TX &amp; RX</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>-1.0</b>

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Part Number: NS892402

## DESCRIPTION: TRANSFORMER

ITEM	TEST CONDITION@25 ℃	SAMPLE NO。 TEST PIN	6	7	8	9	10	SPECIFICATION		
OCL ( uH )	100KHz/0.1Vrms/ 8mA DC	(2,3)	463	467	458	466	462	Min 350	Typ	Max
		(5,6)	468	463	458	466	467			
		(8,9)	458	467	448	463	476			
		(11,12)	455	475	469	466	454			
DCR ( Ω )		(2,3)	0.563	0.563	0.562	0.558	0.554	Min	Typ	Max 1.2
		(5,6)	0.563	0.552	0.549	0.562	0.553			
		(8,9)	0.524	0.521	0.536	0.528	0.537			
		(11,12)	0.538	0.526	0.534	0.531	0.528			
DCR ( Ω )		(13,14)	0.908	0.918	0.903	0.916	0.915	Min	Typ	Max 1.2
		(16,17)	0.914	0.913	0.912	0.916	0.908			
		(19,20)	0.935	0.915	0.924	0.907	0.915			
		(22,23)	0.914	0.918	0.906	0.924	0.917			
LL ( uH )	100KHz/0.1Vrms	(2,3)short(22,23)	0.22	0.23	0.22	0.24	0.21	Min	Typ	Max 0.4
		(5,6) short(19,20)	0.22	0.24	0.23	0.23	0.23			
		(8,9) short(16,17)	0.24	0.22	0.21	0.25	0.22			
		(11,12)short(13,14)	0.22	0.23	0.23	0.24	0.21			
HI-POT (Vrms)	1500 Vrms	PRI/SEC	PASS	PASS	PASS	PASS	PASS	1MIN		
TURN RATIO (±3%)	100KHz/0.1Vrms	PRI/SEC	PASS	PASS	PASS	PASS	PASS	1CT:1CT		
Cross Talk (dB Min)	30MHz	TX to RX	PASS	PASS	PASS	PASS	PASS	-45		
	60MHz		PASS	PASS	PASS	PASS	PASS	-40		
	100MHz		PASS	PASS	PASS	PASS	PASS	-35		
Return loss (dB Min)	1-30MHz	TX & RX	PASS	PASS	PASS	PASS	PASS	-18		
	40MHz		PASS	PASS	PASS	PASS	PASS	-14.4		
	50MHz		PASS	PASS	PASS	PASS	PASS	-13.1		
	60-80MHz		PASS	PASS	PASS	PASS	PASS	-12		
	100MHz		PASS	PASS	PASS	PASS	PASS	-10		

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<b>DCMR</b> (dB Min)	<b>30MHz</b>	<b>TX &amp; RX</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>-43</b>
	<b>60MHz</b>		<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>-37</b>
	<b>100MHz</b>		<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>-33</b>
<b>Insertion loss (dB Max)</b>	<b>1-100MHz</b>	<b>TX &amp; RX</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>-1.0</b>

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Part Number: NS892402			
MATERIAL LIST			
NO:	COMPONENT	MATERIAL	MANUFACTURE
1	CORE	DC50 T2.54*1.27*2.06	NIKKAKIGEN ELECTRONIC CO;LTD
		N8 T2.03*1.27*0.76	NIKKAKIGEN ELECTRONIC CO;LTD
2	WIRE	POLYURETHANE UEW-NY155℃	JUNGSHING WIRE CO;LTD
3	EPOXY	SILICONE 1-2577	HSIN-CHU SILICONE TAIWAN CO.LTD
4	SOLDER WIRE	Sn96.5% Ag3% Cu0.5	Cookson Alpha Metals (Shenzhen) CO;LTD
5	SOLDER BAR	SN99.3%CU0.7%	Cookson Alpha Metals (Shenzhen) CO;LTD
6	CASE	15.1*7.1*4.0,1.0MM, SMT for lead free	GUANGZHOU ZHIDA
7	INK	ZSR 150	CHUNG YU INDUSTRY CORPORATION
8			
9			
10			

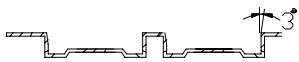
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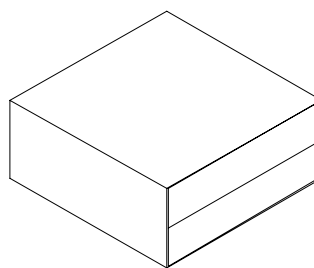
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## 10/100/1000Base-T Single Port Transformer Module

Units: mm Tolerances:  $\pm 0.10$ 

## REEL MECHANICAL DIMENSION



INNER CARTON:340(L)x340(W)x100(H)

EXPORT CARTON:360(L)x360(W)x250(H)



1. ONE ROLL:800PCS
2. THREE ROLL BOX:2400PCS
3. TWO BOX CARTON:4800PCS

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