



10/100Base-T Single Port Transformer Module

P/N: NS681680

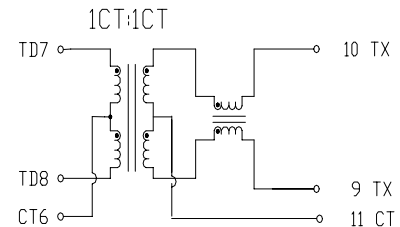
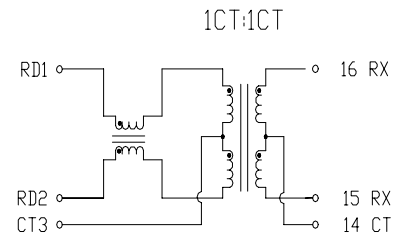
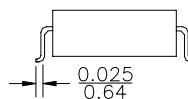
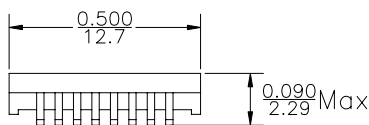
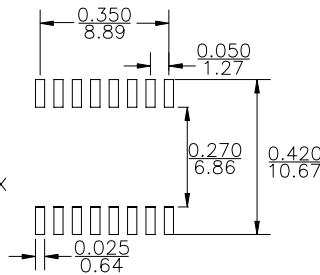
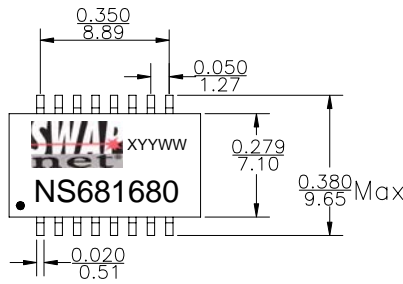
- ★ Designed to meet IEEE802.3u requirement
- ★ Lead-Free & Designed to meet RoHS requirement
- ★ Designed to meet IR 255°C peak Requirement.
- ★ Primary inductance 350μH min.
- ★ Low Profile package for CardBus Application
- ★ Operating temperature range: 0°C to +70°C
- ★ Storage temperature range: 0°C to +85°C

Electrical Specifications @ 25°C

Part Number	Turn Ratio		Insertion Loss 1~100MHz (dB Max)	Return Loss (dB Min)			Cross Talk (dB Min)			CMRR (dB Min)			Hi-Pot (Vrms MIN)
	Tx	Rx		30MHz	50MHz	80MHz	30MHz	60MHz	100MHz	30MHz	60MHz	100MHz	
NS681680	1:1	1:1	-1.0	-16	-12	-11	-50	-45	-33	-30	-30	-30	1500

Mechanical

Schematic



Dimensions: Inches/mm

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

0.xx ± 0.05 (mm)

Data sheet subject to change without notice

Headquarter: 13F, No. 111-5, Hsing Te Rd., Sun Chung City, Taipei Taiwan R.O.C.
 TEL: +886-2-85123848 FAX: +886-2-85123862
 Overseas Operation Office:
 Hong Kong Shanghai Shenzhen



10/100Base-T Single Port Transformer Module

P/N: NS681680

Part Number: NS681680										
DESCRIPTION: TRANSFORMER										
ITEM	TEST CONDITION@25°C	SAMPLE NO. TEST PIN	1	2	3	4	5	SPECIFICATION		
								Min	Typ	Max
OCL (uH)	100KHz/0.1Vrms	(16-15)	524	575	536	554	568	350		
		(7-8)	568	532	548	529	535			
LK (uH)	100KHz/0.1Vrms	(16-15)	0.18	0.16	0.15	0.13	0.16	Short(1-2)		Max
		(7-8)	0.15	0.14	0.16	0.12	0.18	Short(10-9)		0.35
DCR (Ω)	100KHz/0.1Vrms	(16-15)	0.56	0.52	0.58	0.52	0.54			Max
		(7-8)	0.55	0.53	0.54	0.59	0.55			0.8
DCR (Ω)	100KHz/0.1Vrms	(1-2)	0.93	0.96	0.92	0.95	0.98			Max
		(10-9)	0.96	0.95	0.91	0.96	0.97			1.2
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&RX	PASS	PASS	PASS	PASS	PASS	-50		
	60MHz		PASS	PASS	PASS	PASS	PASS	-45		
	100MHz		PASS	PASS	PASS	PASS	PASS	-33		
Return loss (dB Min)	30MHz	TX&RX	PASS	PASS	PASS	PASS	PASS	-16		
	50MHz		PASS	PASS	PASS	PASS	PASS	-12		
	80MHz		PASS	PASS	PASS	PASS	PASS	-11		
CMRR (dB Min)	30MHZ	TX&RX	PASS	PASS	PASS	PASS	PASS	-30		
	60MHz		PASS	PASS	PASS	PASS	PASS	-30		
	100MHz		PASS	PASS	PASS	PASS	PASS	-30		
Insertion loss (dB Max)	1-100MHz	TX & RX	PASS	PASS	PASS	PASS	PASS	-1.0		

Headquarter: 13F, No. 111-5, Hsing Te Rd., Sun Chung City, Taipei Taiwan R.O.C.
 TEL: +886-2-85123848 FAX: +886-2-85123862
 Overseas Operation Office:
 Hong Kong Shanghai Shenzhen



10/100Base-T Single Port Transformer Module

P/N: NS681680

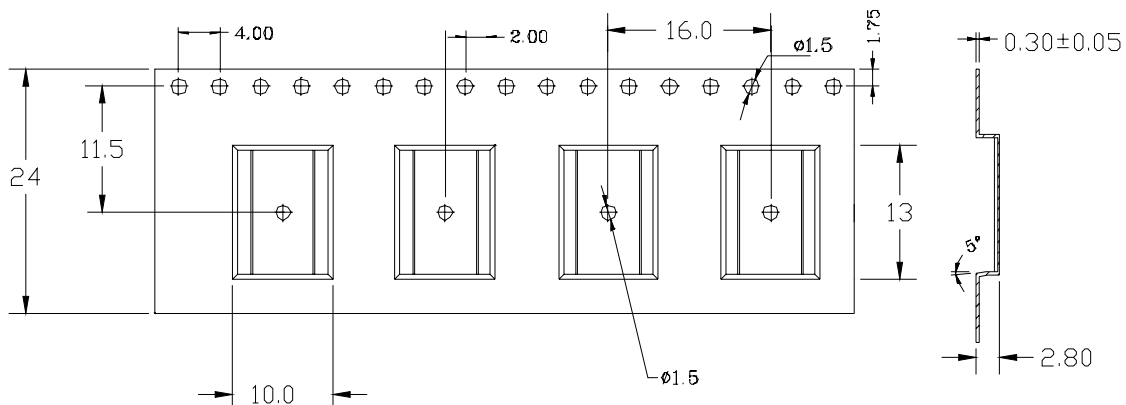
Part Number: NS681680										
DESCRIPTION: TRANSFORMER										
ITEM	TEST CONDITION@25°C	SAMPLE NO. TEST PIN	6	7	8	9	10	SPECIFICATION		
								Min	Typ	Max
OCL (uH)	100KHz/0.1Vrms	(16-15)	567	529	564	522	536	350		Max
		(7-8)	598	537	601	568	581			
LK (uH)	100KHz/0.1Vrms	(16-15)	0.15	0.14	0.17	0.13	0.12	Short(1-2)		Max 0.35
		(7-8)	0.18	0.16	0.15	0.14	0.11	Short(10-9)		
DCR (Ω)	100KHz/0.1Vrms	(16-15)	0.52	0.53	0.59	0.57	0.53			Max 0.8
		(7-8)	0.55	0.52	0.54	0.56	0.57			
DCR (Ω)	100KHz/0.1Vrms	(1-2)	0.95	0.98	0.92	0.94	0.95			Max 1.2
		(10-9)	0.92	0.96	0.94	0.91	0.96			
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&RX	PASS	PASS	PASS	PASS	PASS	-50		
	60MHz		PASS	PASS	PASS	PASS	PASS	-45		
	100MHz		PASS	PASS	PASS	PASS	PASS	-33		
Return loss (dB Min)	30MHz	TX&RX	PASS	PASS	PASS	PASS	PASS	-16		
	50MHz		PASS	PASS	PASS	PASS	PASS	-12		
	80MHz		PASS	PASS	PASS	PASS	PASS	-11		
CMRR (dB Min)	30MHZ	TX&RX	PASS	PASS	PASS	PASS	PASS	-30		
	60MHz		PASS	PASS	PASS	PASS	PASS	-30		
	100MHz		PASS	PASS	PASS	PASS	PASS	-30		
Insertion loss (dB Max)	1-100MHz	TX & RX	PASS	PASS	PASS	PASS	PASS	-1.0		

Headquarter: 13F, No. 111-5, Hsing Te Rd., Sun Chung City, Taipei Taiwan R.O.C.
 TEL: +886-2-85123848 FAX: +886-2-85123862
 Overseas Operation Office:
 Hong Kong Shanghai Shenzhen



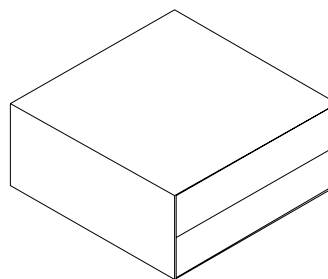
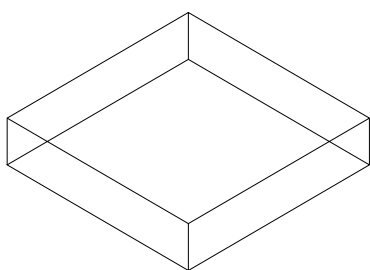
10/100Base-T Single Port Transformer Module

P/N: NS681680



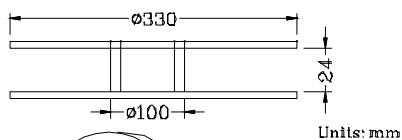
Units: mm Tolerances: ±0.10

REEL MECHANICAL DIMENSION

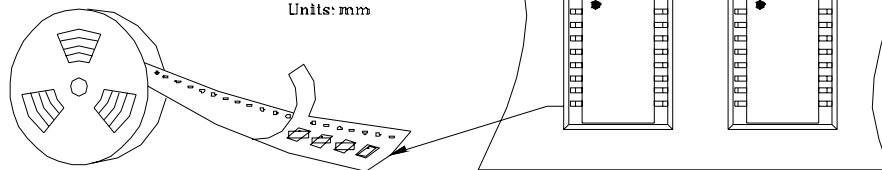


INNER CARTON: 340(L)x340(W)x100(H)

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



Units: mm



- 1. ONE ROLL: 1500PCS
- 2. THREE ROLL BOX: 4500PCS
- 3. TWO BOX CARTON: 9000PCS

Headquarter: 13F, No. 111-5, Hsing Te Rd., Sun Chung City, Taipei Taiwan R.O.C.
 TEL: +886-2-85123848 FAX: +886-2-85123862
 Overseas Operation Office:
 Hong Kong Shanghai Shenzhen