



LAN Transformer Module Catalog

2018 A0

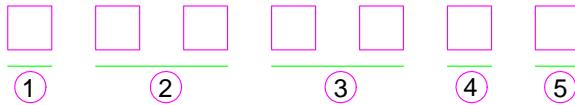
Dedication to Excellence
铭诚于心 普实于行

Mentech LAN discrete magnetic transformers are designed and manufactured to comply with IEEE802.3 and ANSI X3.263 standards. Products include 10/100 Base-T, 10/100/1000Base-T, 2.5G/5G Base-T, 10G Base-T, Power Over Ethernet and ESD/Surge protected transformer modules. These products are widely used in internet equipments, broadband terminals, computer, voice and multimedia equipments, etc.

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Definition of Part Number

Part Name:



Description

① Product type	H 10/100 Base-T G 100/1000 Base-T M 10G Base-T TE T1/E1/CEPT/ISDN PRI
② Number of pins	4 Pin 16 Pin
③ Serial Number	1 2 3
④ Package	D Through Hole C Surface Mount(SMT) Open header type A Surface Mount(SMT) Assembly header type
⑤ Extracode	G RoHS or Halogen free E Operation Temperature,Industrial Grade

Example: H1601CG

H1601CG has the characteristics of a single port, 16pin surface mount , open header package and halogen free.

Manufacturer	IC	10 Base-T		10/100 Base-T			100/1000 Base-T		T1/E1/CEPT/ISDN	
		Single	Single	Dual	Quad	Single	Dual	Single	Dual	
Cirrus Logic	CS8900A-CQ3	T1602CG								
	CS8952		H1601CE							
	CS8952T		H1601CE	H2401CG						
Cirrus logic(Crystal)	61577 61884 61584/84A									TE1203CG
	61304A/5A/535A/574A,/75									TE1204CG
	61304A/5A/535A/574A,/75									TE1208CE
	6,131,061,581									TE1208CE
	61310 61583									TE1602CG
	61310 61581									TE1602CE
	LXT914 LXT915 LXT916	T1620CG								
	LXT917 LXT918 LXT944	T1621CG								
	82551/2551QM/551ER			H2401CG	H4001CG					
	82559/559ER		H1601CE		H4001CE					
	LXT970A/971(ALC)/972A									
	LXT972		H1606CG							
Intel	82540/ 541/544/543					G2436CG	G4801CG			
	82544/545/546/547						G5002CG			
	82562						G4830CG			
	82576EB					G2436CG		TE1208CE		
	LXT350,LXT351,LXT359							TE1602CG		
	LXT360/361/362/363							TE1602CE		
	LXT380/381/384/386/388							TE1609CG		
	LXT380/381/384/386/388							TE1609CG		
	LXT3104,LST3108							TE1609CE		
	LXT380/381/384/386/388							TE1609CE		
	LXT3104,LXT3108							TE1203CG		
	LXT380/381,384/386/388							TE1203CG		
	LXT3104,LXT3108									
	XRT75XXX XRT73L00/2/3/4/6/12	T2401CE								
	XRT73LC03A/04A,R12	T2401CE								
EXAR	XRT7300/7302	T2401CE								
	T5684 XRT7288 82D20							TE1201CG		
	XRT5683A,XRT59L91							TE1203CE		
	XRT81L27,82L24,82D20							TE1203CE		
	XRT83L30/4/8/314							TE1208CE		
	86L38 XRT86L30/32/34/38							TE1208CE		
	XRT83L30/4/8/314,86L38							TE1602CG		
	XRT83SL30/4/8/314							TE1602CG		
	XRT86L30/32/34/38							TE1602CE		
	XRT5683A,XRT59L91							TE1609CG		
	XRT5894/5897/5997							TE1609CG		
	XRT81L27,82L24,82D20							TE1609CG		
	XRT75XXX							TE3205CG		
	XRT73L00/2/3/4/6/12								TE3205CG	
	XRT73LC03A/04A								TE3205CG	
	XRT7300/7302								TE3205CG	
Mindspeed	CN28333/332/331							T2401CE		
	M28335/M28356							T2401CE		
	M28354/3/2							T2401CE		
Agere	ET901		H1601CG	H2401CG						
	ET908		H1601CG							
	ET1011 ET1012					G2436CG	G4801CG			
	ET1081						G5002CG			
	ET1310					G2405CG	G4802CG			
	ET2005-40/50						G4830CG			
	ET2008-30/40/50					G2443CG				
	ET3028-50									

Manufacturer	IC	10 Base-T		10/100 Base-T		100/1000 Base-T		T1/E1/CEPT/ISDN	
		Single	Single	Dual	Quad	Single	Dual	Single	Dual
AMD	AM79C874/C875		H1601CG	H2401CG					
	AM79C971/C972/C973/		H1601CG						
	AM79C975/C976/C977		H1601CG						
Broadcom	AC101, AC101L		H1601CG	H2401CG					
	AC104/205/206/207/208				H4001CG				
	AC131		H1602CG		H4001CG				
	BCM1190		H1601CG						
	BCM5241		H1601CG		H4001CG				
	BCM5220/ 5221		H1601CG						
	BCM5222		H1602CG						
	BCM1100/110/		H1606CG						
	BCM6345/6348		H1602CG						
	BCM5350/5380		H1601CG						
	AC104, BCM5208R		H1601CG						
	BCM5315/5325(M)		H1601CE		H4001CE				
	BCM5225/26/27		H1601CG		H4807CG				
	AC207/208		H1606CG						
	BCM5400, BCM5401					G2413CG	G4801CG		
	BCM5411/21/21S						G5002CG		
	BCM5460/61/81					G2405CG	G4802CG		
	BCM5701/02/03/04/05					G2443CG	G4830CG		
	BCM5461S					G2497AG			
	BCM5789					G2411CG			
	BCM1100/110/AC104,BCM5208R					G2413CG			
	AC1011/1012					G2497AG			
	AC131 BCM5220/5221					G2456CG			
	Infineon ADM7001					G2456CG			
Davicom	DM9000/A		H1601CE	H2401CG					
	DM9102A/D		H1601CG						
	DM9601		H1601CE						
	DM9301/9331		H1606CG						
IC+	3097-F, 3299A			H2401CG	H4001CG				
	IP100A		H1601CE						
	IP108		H1601CE		H4001CE				
	IP1726				H4807CG				
	IP101								
ICS	ICS1890/1891		H1601CG						
	ICS1893					G2413CG			
Infi neon	ADM8511/8513/9511		H2401CG						
	ADM9513, AN983B		H1601CG	H2422CG					
	ADM7001		H1601CG						
	ADM6305				H4001CG				
	AN985B/L autoMDX					G2413CG			
	ADM7001					G2456CG			
Luminary Micro	LM3S6938		H1601CG						
	LM3S8962		H1606CG						
LSI	L80223		H1601CG	H2401CG					
	L80227		H1606CG						
	L80600					G2413CG	G4801CG		
	L80601					G2497AG			
Marvell	88E6021			H2401CG	H4001CG				
	88E6060/88E6218		H1601CE		H4001CE				
	88E6052,88E6063		H1606CG		H4807CG				
Marvell Semiconductor	88E1010/1011S					G2436CG	G4801CG		
	88E1111/12/14/18/19						G5002CG		
	88E1040/1040S/1041						G4830CG		
	88E1041S/1042/1042S					G2443CG			

Manufacturer	IC	10 Base-T		10/100 Base-T			100/1000 Base-T		T1/E1/CEPT/ISDN	
		Part Number	Single	Single	Dual	Quad	Single	Dual	Single	Dual
MICREL	KS8721B/21BL/37		H1601CG	H2401CG						
	KS8737		H1601CG							
	KSZ8893		H1606CG							
	KS8995/95M/95MA/95E		H1606CG							
	KS8737					G2413CG				
Micro	KS9020						G2436CG	G4801CG		
Microchip	PIC18F87J50		H1601CG							
	ENC28J60		H1601CG							
MicroLinear	ML6652		H1601CG							
Myson	MTD971		H1601CG	H2401CG						
	MTD981		H1601CG							
Mysticom	MystiPHY110		H1601CE						G4801CG	
Mysticom	MY1001						G2497AG		G5002CG	
National Semiconductor	DP83847		H1601CG	H2401CG						
	DP83848/C		H1636CG							
	DP83816 (macphyter II)		H1601CE							
Realtek	RTL8100C/101L/100B		H1601CG	H2401CG						
	RTL8150				G2413CG					
	RTL8019AS		H1601CE							
	RTL8181/86		H1606CG							
	RTL8208		H1601CG		H4001CG					
	RTL8316				H4001CG					
	RTL8211/12						G2436CG	G4801CG		
	RTL8169								G5002CG	
	RTL8150		H1601CG				G2413CG			
SIS	SiS900		H1606CG							
SMSC	LAN83C183/185		H1601CG	H2401CG						
	LAN8187						G2443CG			
	LAN91C100FD/110									
	LAN91C111		H1606CG							
National Semiconductor	DP83865						G2436CG	G4801CG		
	DP83864						G2497AG	G5002CG		
	DP83640						G2443CG			
Vitesse Semiconductor	VSC8201/8211						G2436CG	G4801CG		
	VSC8221/8601/8641						G2497AG	G5002CG		
	VSC8204/24/34/44						G2401CG			
	VSC8558/8538						G2443CG			
	wVSC7380/7384						G2411CG			
	VSC7388/7398							G4802CG		
	DS2151/2152/2153/2154								TE1201CG	
Maxim	DS2148/Q48								TE1201CG	
	DS21552/Q552								TE1201CG	
	DS21554/Q554								TE1201CG	
	DS2196,2155,2149,21448								TE1208CE	
	DS21352/Q352,DS21354/Q354								TE1208CE	
	DS26502/3 DS21455/8 DS26528								TE1208CE	
	DS2196,2155,2149,21448								TE1602CG	
	DS2148/Q48/Q348/349/Q59								TE1602CG	
	DS21352/Q552,DS21354/Q354								TE1602CE	
	DS2196,2155,2149,21448								TE1602CE	
	DS2148/Q48/Q348/349/Q59								TE1602CE	
	DS21352/Q352,DS21354/Q354								TE1602CE	
	DS21455/8 DS26528								TE1602CE	
PMC-Sierra	PM4341/6341/4314								TE1201CG	
	PM4323/								TE1203CG	
	PM4325								TE1609CG	
Infineon Technologies (Siemens)	PEB2254/55								TE1201CG	
	PSB21381/82/83/84								TE1603CG	
	PEB3018/86,PSB3186								TE1603CG	

Manufacturer	IC	10 Base-T		10/100 Base-T			100/1000 Base-T		T1/E1/CEPT/ISDN	
		Part Number	Single	Single	Dual	Quad	Single	Dual	Single	Dual
IDT	82V2041E/2E/4E/8E								TE1208CE	
	82V2081/2/4/8 82P2281/2/4/8								TE1602CE	
Mindspeed	M29378/M29374/M29371M29368								TE1602CE	
	CN28333/332/331 M28335								TE3205CG	
Maxim	M28356 M28354/3/2								TE3205CG	
	DS2196,2155,2149,21448								TE1602CG	
	DS2148/Q48/Q348/349/Q59								TE1602CG	
	DS21352/Q552,DS21354/Q354								TE1602CG	
Zarlink	DS26502/3 DS26502/3								TE1602CE	
	DS21455/8 DS26528								TE1602CE	
Zarlink	MT9074,MT9075								TE1617CE	
MOTOROLA	MC145474/4/475								TE1603CG	
	MC145574								TE1604CG	
Transwitch	ART TXC-02020 ARTE TXC-2021								TE3205CG	
	DARTTXC-2030,DS3DARTTXC-2030								TE3205CG	
	E3 DS3LIM-SN,TSC20153G								TE3205CG	
	E3LIM TXC-20163								TE3205CG	

Optimization of Product Number

Package Type	DATA Rate	Port	P/N	P/N	P/N	P/N
SMT	10/100 BASE-T	SINGLE PORT	H1601CG	H1604CG	H1606CG	H1631CG
	100/1000 BASE-T	SINGLE PORT	G2401CG	G2405CG	G2488CE	G2497CG
	10/100 BASE-T	QUAD PORT	H4001CG	H4807CG		
	100/1000 BASE-T	DUAL PORT	G4802CG	G4811CG		
DIP	100/1000 BASE-T	SINGLE PORT	G2401DG	G2408DG	G1801DG	G1811DG
	10/100 BASE-T	DUAL PORT	H2001DG	H2002DG	H2052DG	
	100/1000 BASE-T	DUAL PORT	G3601DG	G3614DG	G4801DG	G4804DG
	100/1000 BASE-T	QUAD PORT	G7201DG	G7216DG	G9607DG	
Leading Specification	DATA Rate	Port	P/N	P/N	P/N	P/N
POE+	100/1000 BASE-T	SINGLE PORT	G2462CE	G2484CE	G24102CE	G24115CE
	100/1000 BASE-T	DUAL PORT	G4813CG	G4818CG		
	100/1000 BASE-T	QUAD PORT	G9603DG			
2.5G	2.5G BASE-T	SINGLE PORT	G24125CE			
	2.5G BASE-T	DUAL PORT	G5015CG			
2.5G	5G BASE-T	SINGLE PORT	G24155CG			
	5G BASE-T	DUAL PORT	G4850CG			
10G	10G BASE-T	SINGLE PORT	M2401CG	M2403CG		
	10G BASE-T	DUAL PORT	M4801CG			

10/100 BASE-T SINGLE PORT THROUGH-HOLE MAGNETICS

- Meets IEEE 802.3 & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Through-Hole Type.
- Operating temperature range: 0°C to +70°C.

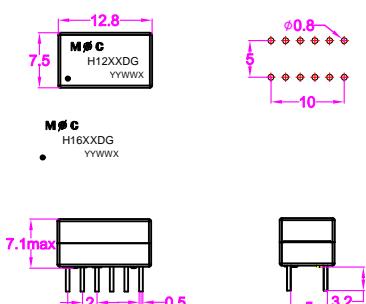


Electrical Specifications @25°C

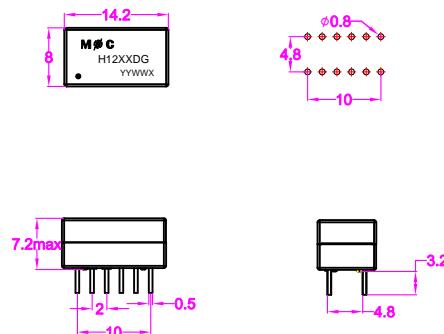
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)			Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz			
H1201DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	
H1202DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	
H1206DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	
H1222DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

H1201DG H1222DG



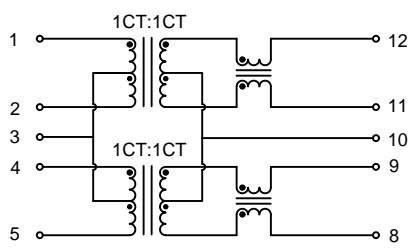
H1202DG H1206DG



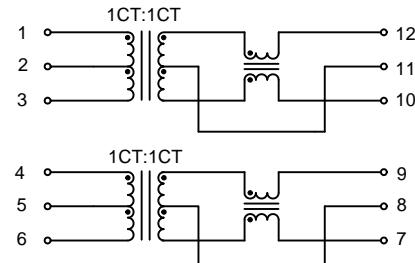
Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

H1201DG H1202DG



H120DG H1222DG



- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.

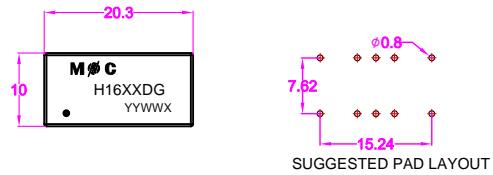


Electrical Specifications @25°C

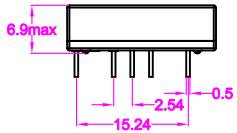
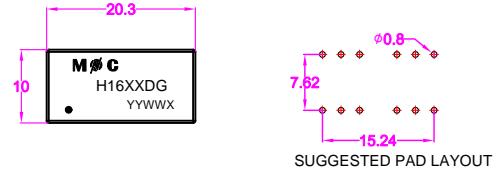
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)			Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	Hi-POT (Vrms)
			0.5-10MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz			
H1605DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	
H1610DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

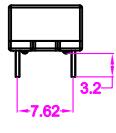
H1605DG



H1610DG



NOTE: PIN 2,6,8,9,11,15 cut off

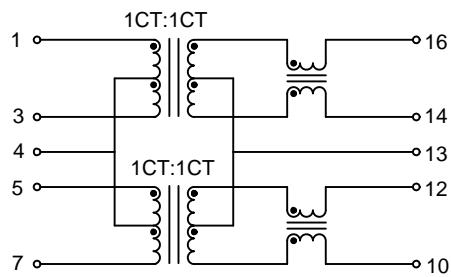


NOTE: PIN 4,8,9,13 cut off

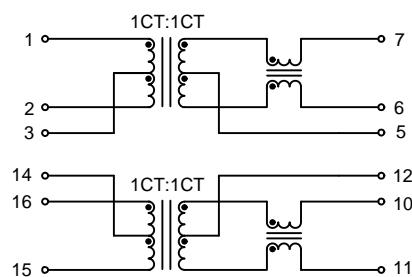
Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS

H1605DG



H1610DG



- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.

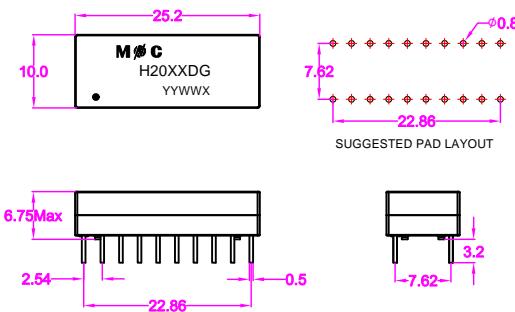


Electrical Specifications @25°C

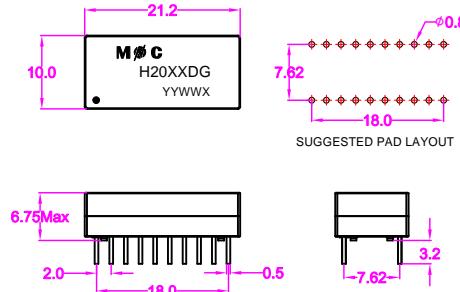
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz		
H2001DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500
H2002DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500
H2005DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500
H2038DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

H2001DG, H2005DG



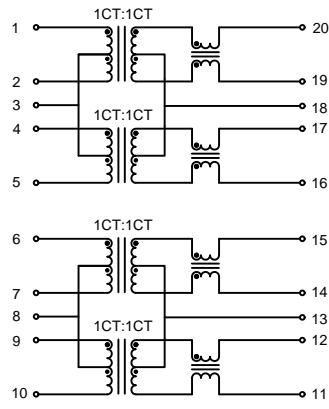
H2002DG, H2038DG



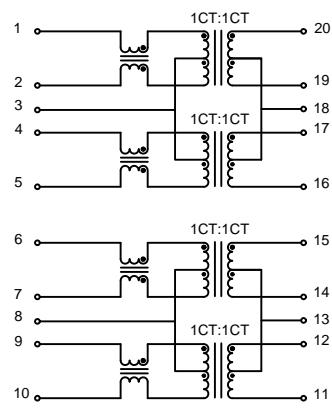
Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

H2001DG, H2002DG



H2005DG, H2038DG



- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.

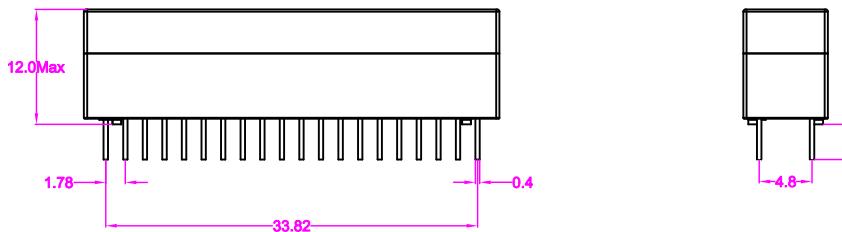
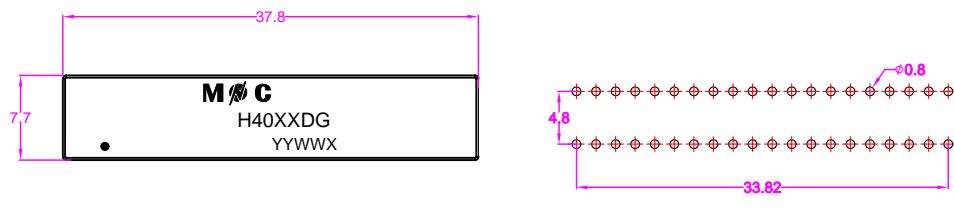


Electrical Specifications @25°C

Part Number	OCL(uH)	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
	100KHz,0.1Vrms, With 8mA DC Bias			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz	
H4001DG	350uH	1CT:1CT	-1.1	-18	$-18+20\log(f/30)$		-12	-35	$-33+20\log(f/50)$	-30
H4011DG	350uH	1CT:1CT	-1.1	-18	$-18+20\log(f/30)$		-12	-35	$-33+20\log(f/50)$	-30

MECHANICAL

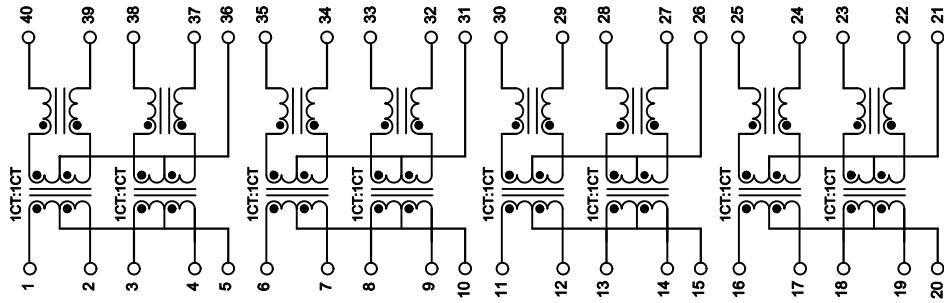
H4011DG,H4012DG



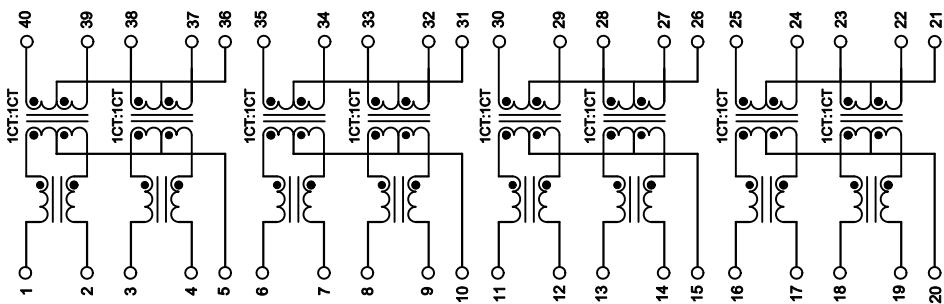
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

H4001DG



H4011DG



- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Through-Hole Type.
- Standard and Extended Operate Temperature .

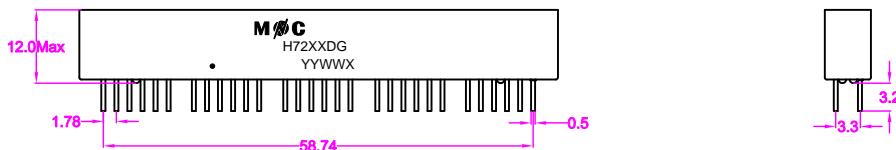
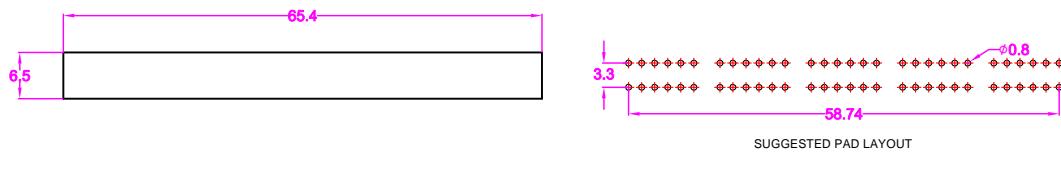


Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)			Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz			
H7201DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

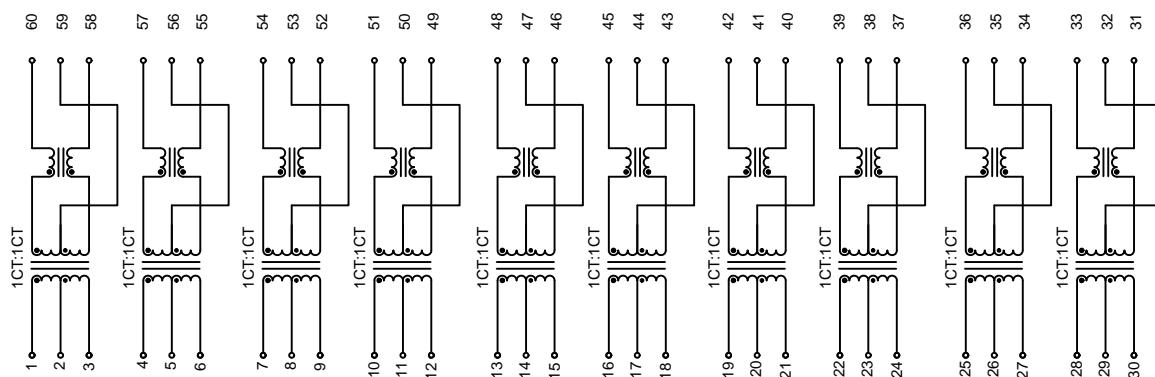
H7201DG



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

H7201DG



- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.

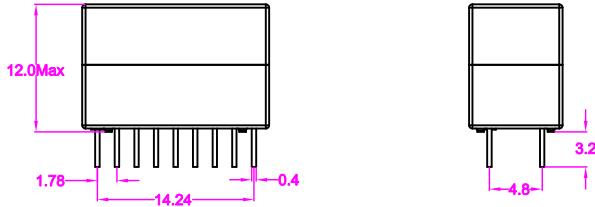
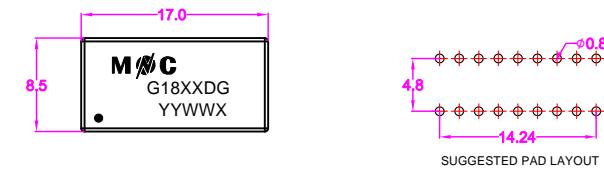


Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms,	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	With 8mA DC Bias			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz		
G1801DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G1802DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G1803DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G1811DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G1814DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

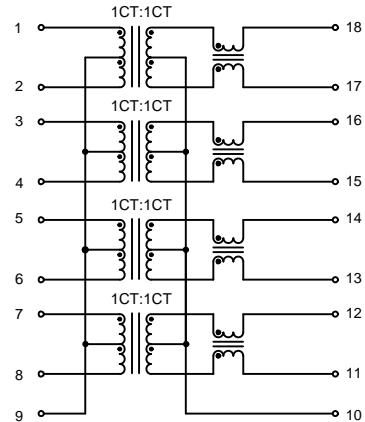
G18XXDG



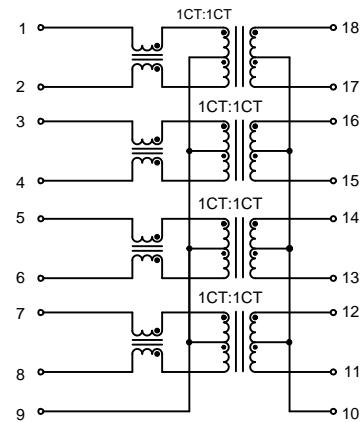
Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS

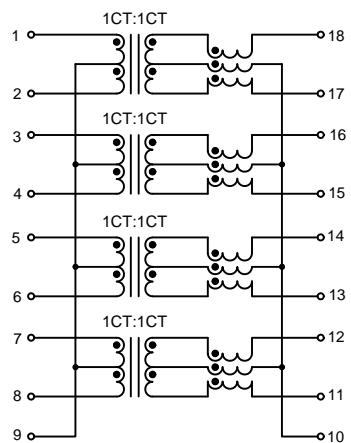
G1801DG



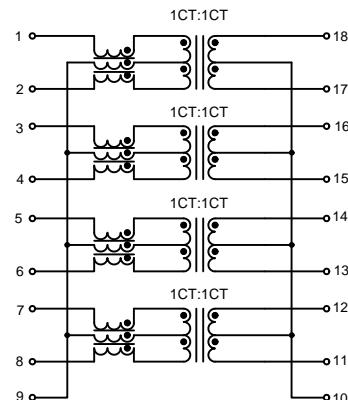
G1802DG



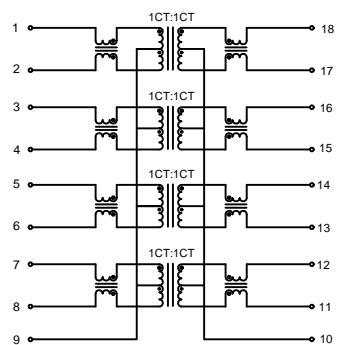
G1803DG



G1811DG



G1814DG



- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.

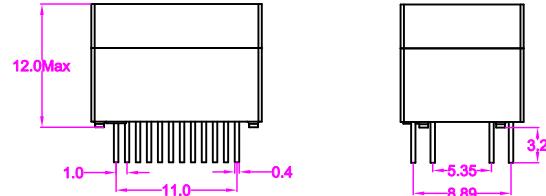
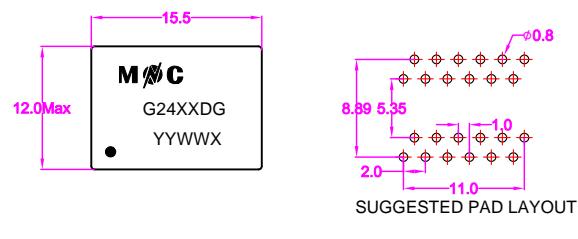


Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz			
G2401DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

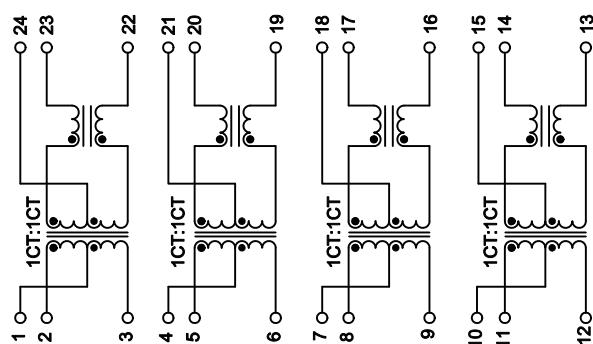
MECHANICAL

G2401DG



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.

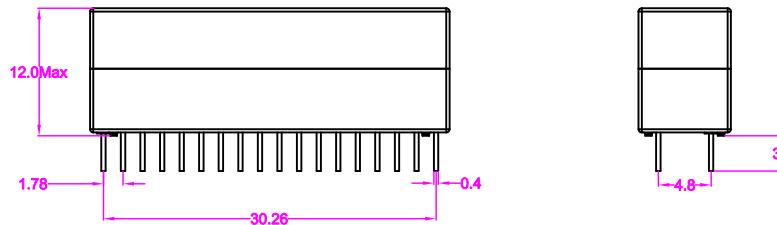
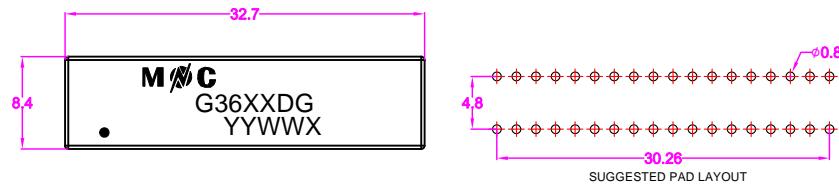


Electrical Specifications @25°C

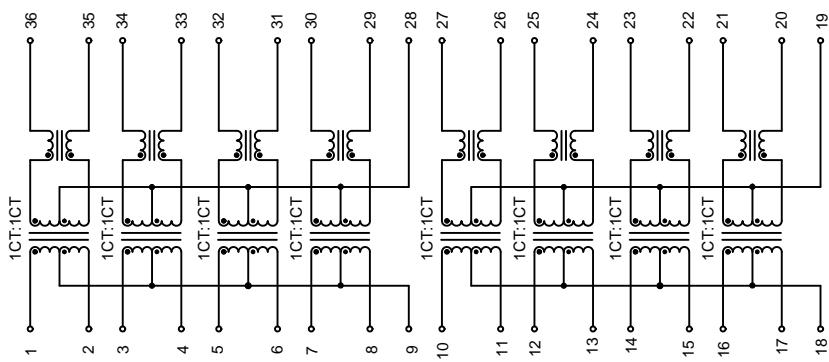
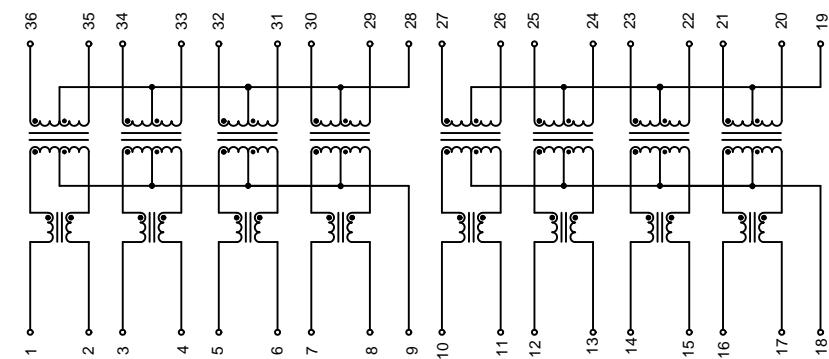
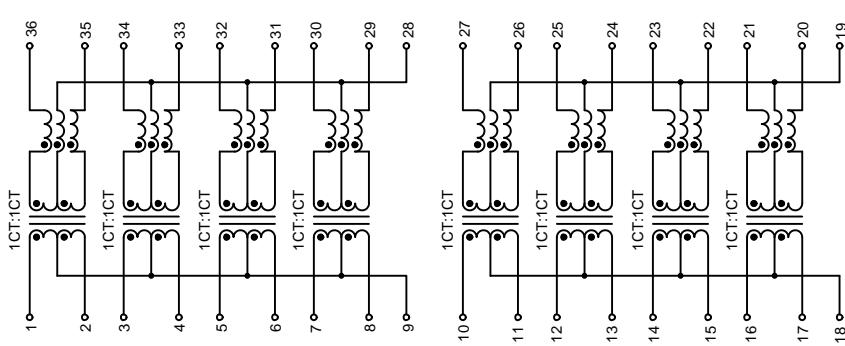
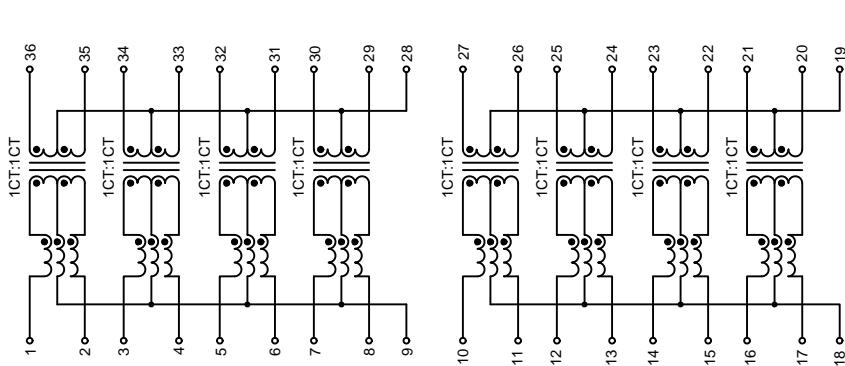
Part Number	OCL(uH) 100KHz,0.1Vrms,	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
	With 8mA DC Bias			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz		
G3601DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G3614DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G3604DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G3608DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

G36XXDG



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS
G3601DG

G3614DG

G3604DG

G3608DG


- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.

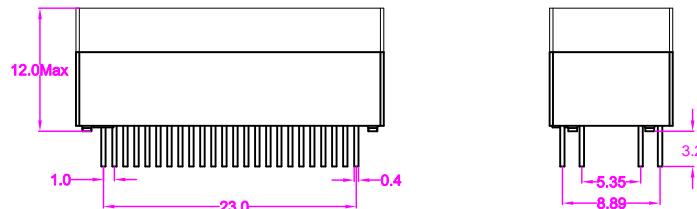
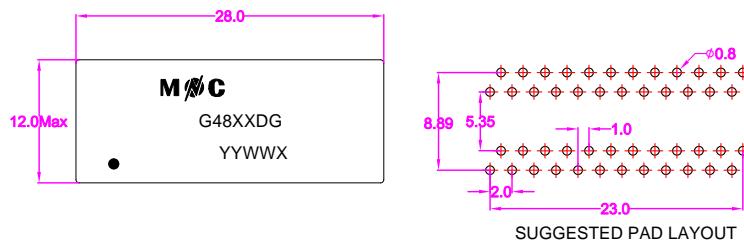


Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms,	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	With 8mA DC Bias			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz		
G4801DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G4802DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G4804DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500
G4805DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

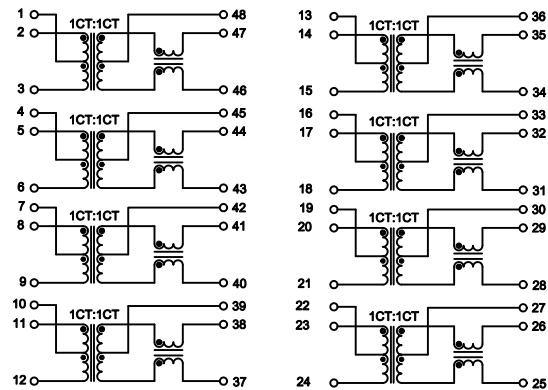
G48XXDG



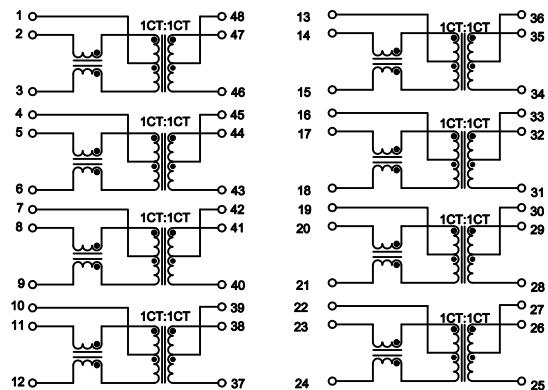
Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

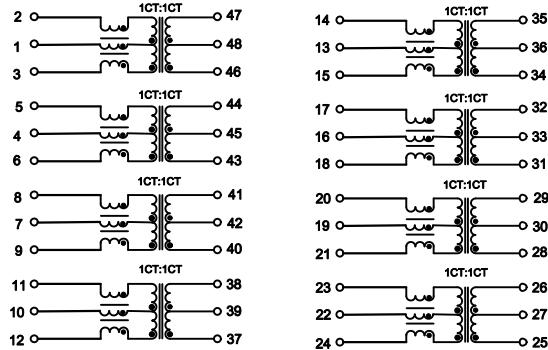
G4801DG



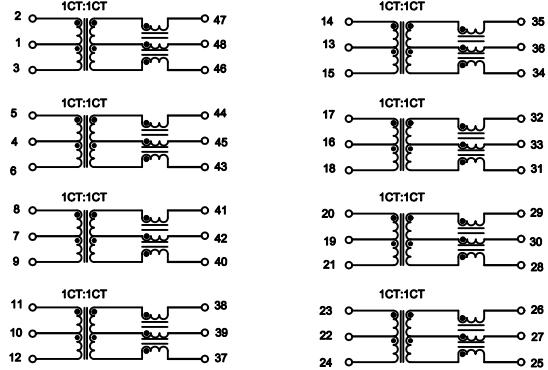
G4802DG



G4804DG



G4805DG



- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.

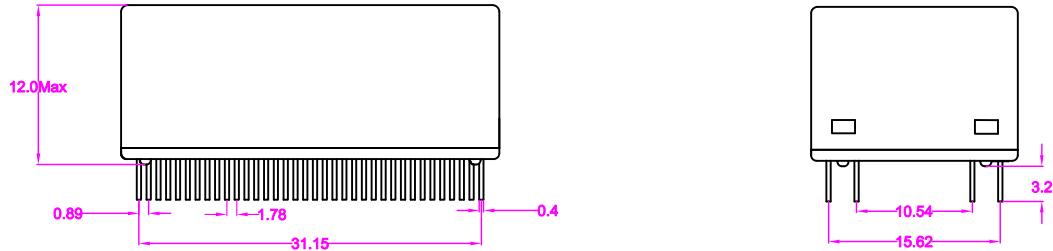
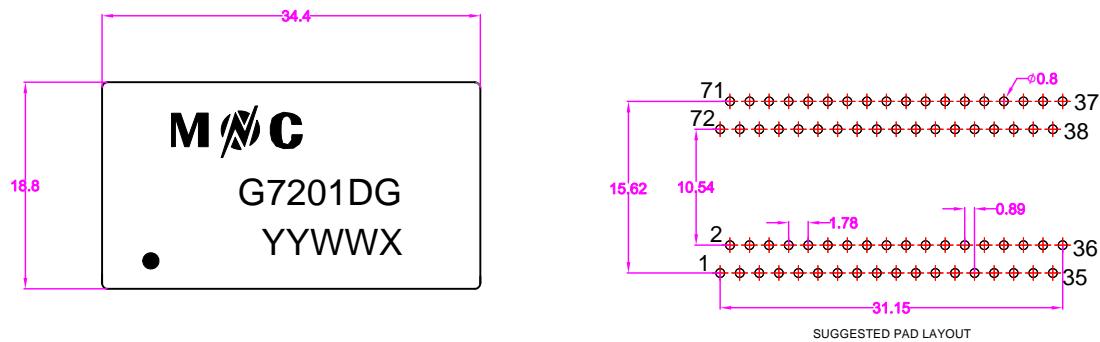


Electrical Specifications @25°C

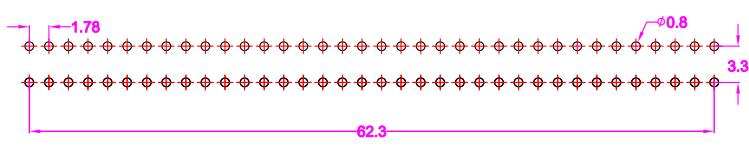
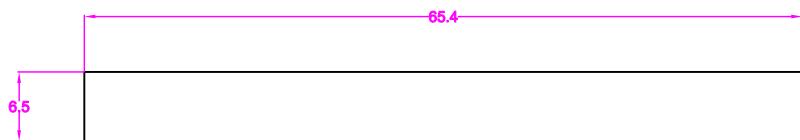
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz			
G7201DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	
G7202DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	
G7216DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

G7201DG, G7216DG



Unless otherwise specified all tolerances are: ±0.25 in mm

G7202DG

SUGGESTED PAD LAYOUT

 Unless otherwise specified all tolerances are: ± 0.25 in mm

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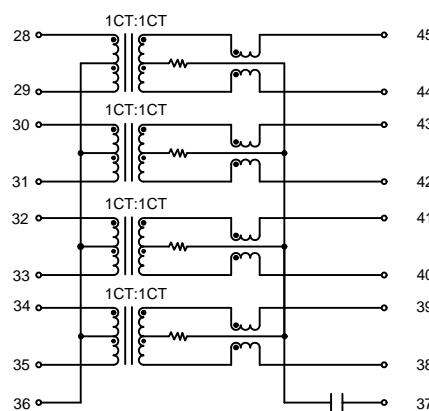
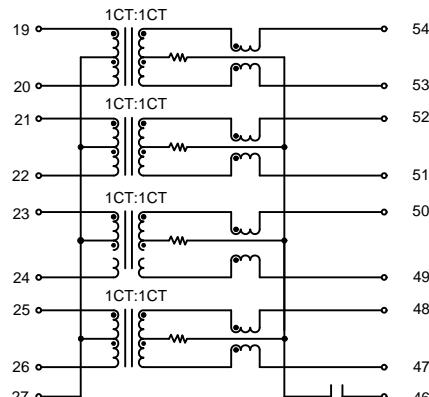
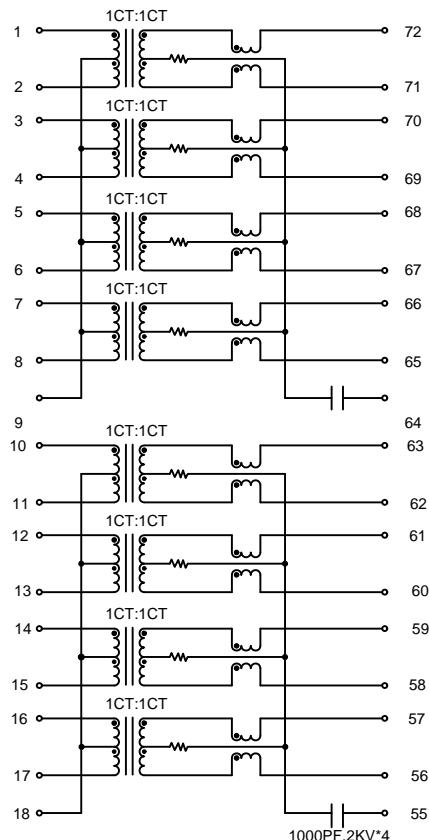
www.mnc-tek.com

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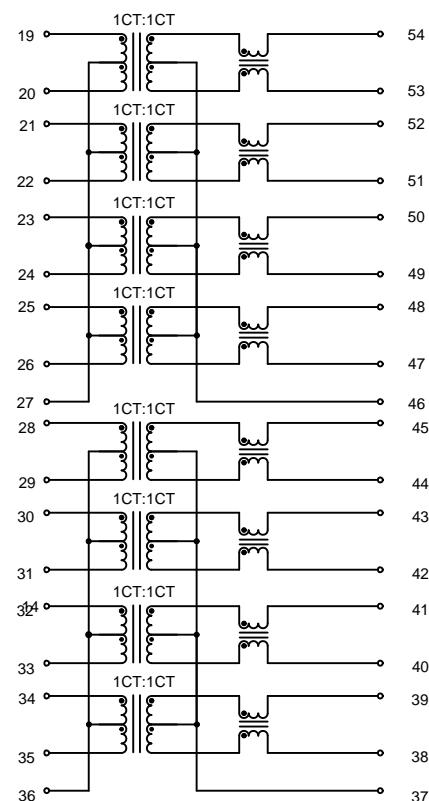
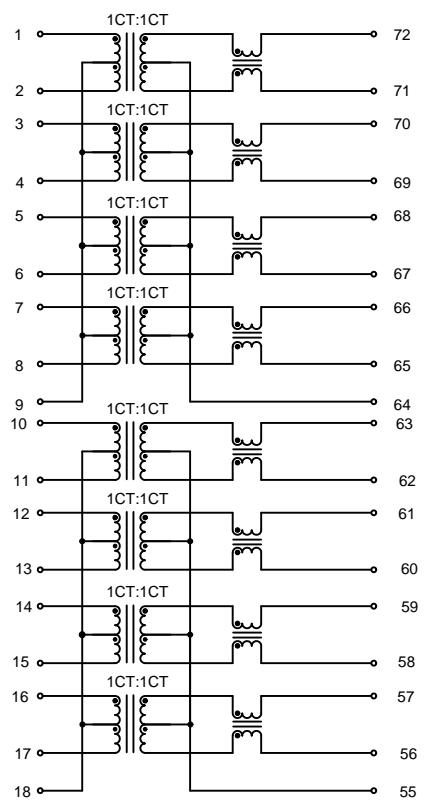
www.mnc-tek.com

SCHEMATICS

G7201DG



G7216DG, G7202DG



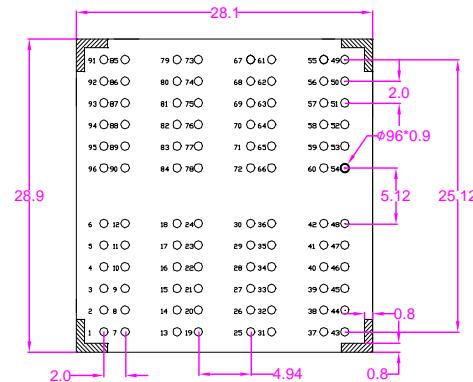
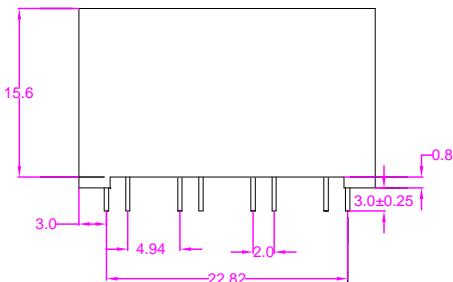
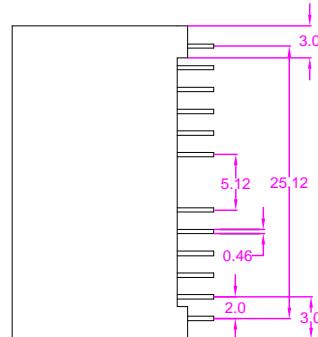
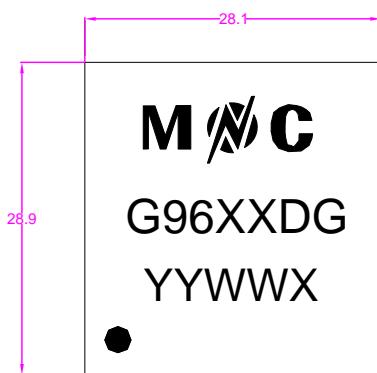
- Meets IEEE 802.3 & ANSI X3.263 Standards.
- RoHS Compliant.
- 100/1000 Base-T, Through-Hole Type .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz			
G9601DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	
G9607DG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

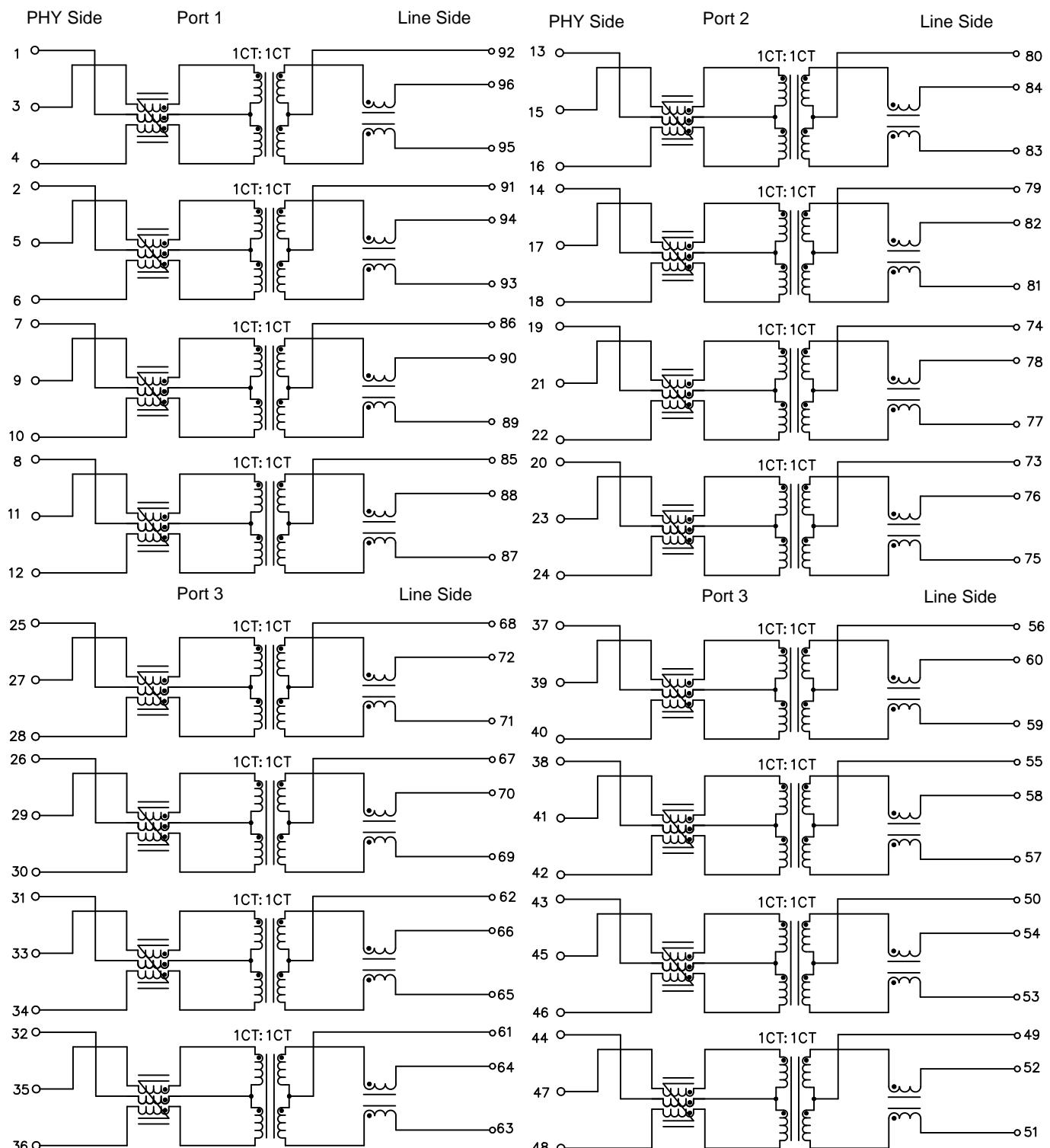


NO COMPONENT AREA.
Suggested Customer PCB Layout
(Component Side)

Unless otherwise specified all tolerances are: ±0.25 in mm

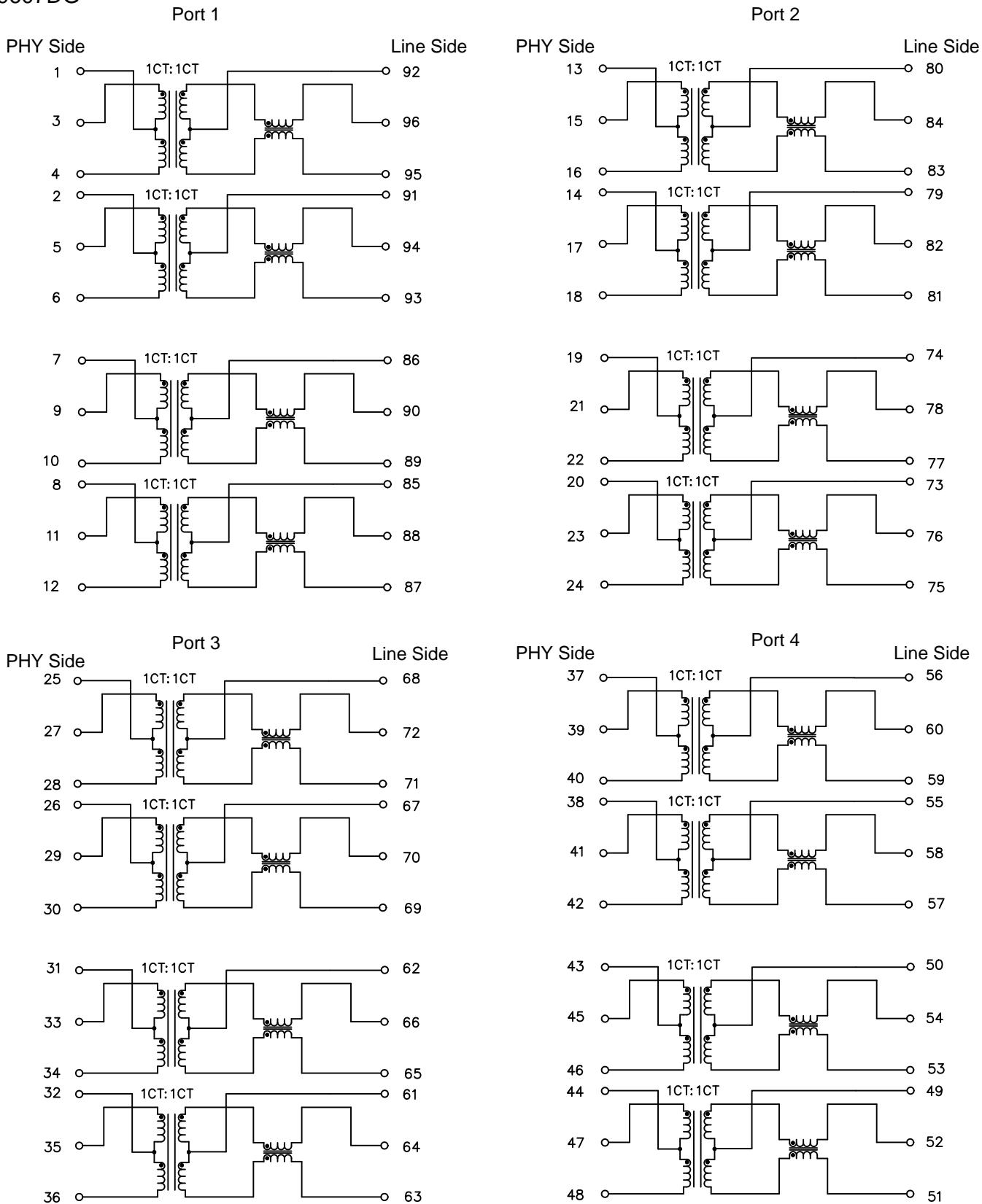
SCHEMATICS

G9601DG



SCHEMATICS

G9607DG



- Meets IEEE 802.3 & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

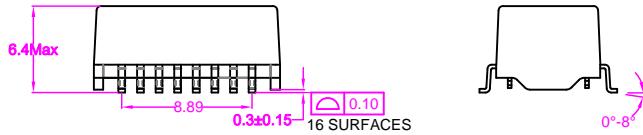
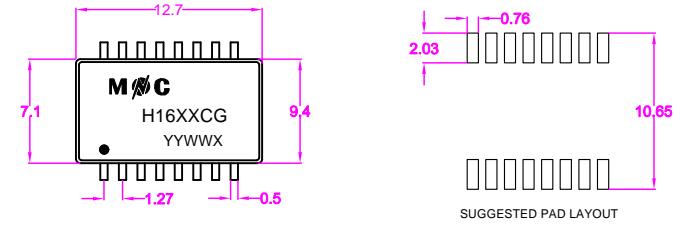


Electrical Specifications @25°C

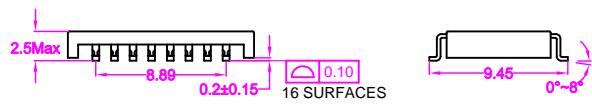
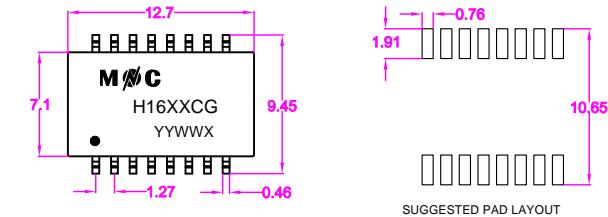
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	Hi-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz		
H1601CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500
H1604CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500
H1631CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500

MECHANICAL

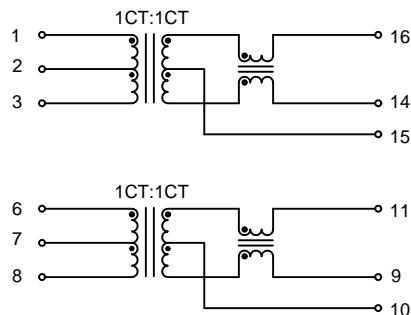
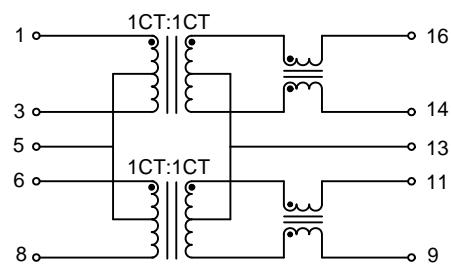
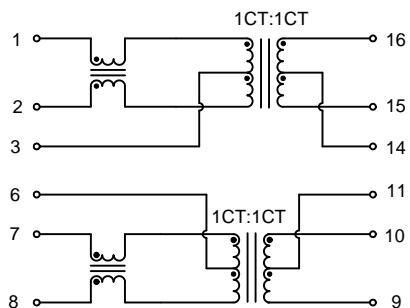
H1601CG H1604CG



H1631CG



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS
H1601CG

H1604CG

H1631CG


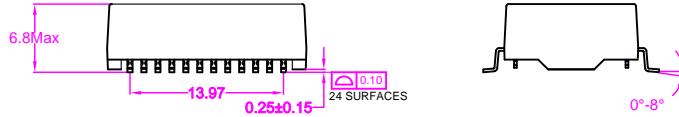
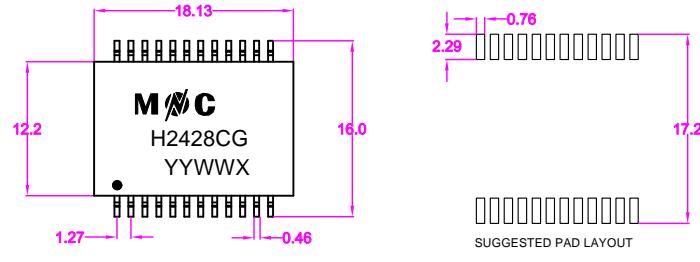
- Meets IEEE 802.3 & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

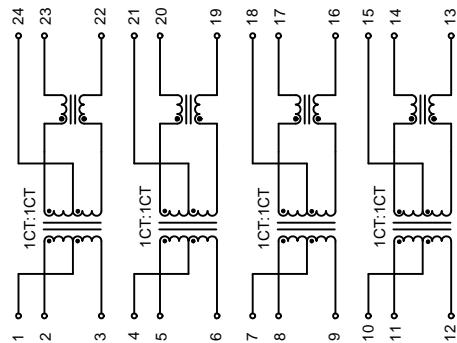
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)			Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz			
H2428CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



- Meets IEEE 802.3 & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

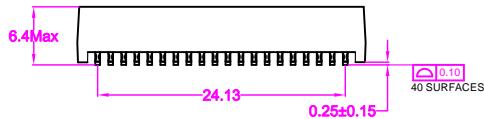
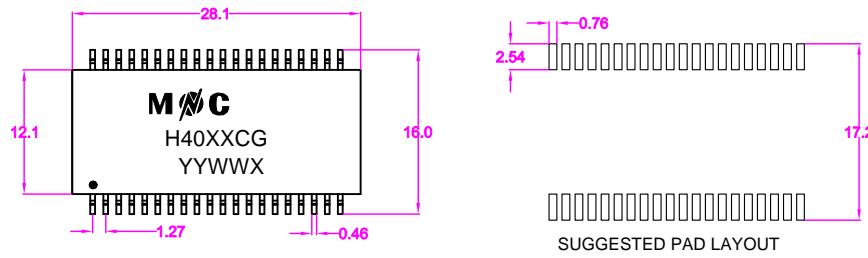


Electrical Specifications @25°C

Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)			Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz				
H4001CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	1500		

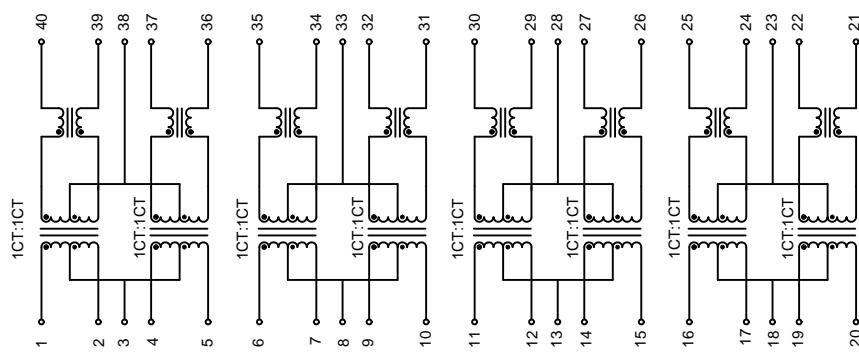
MECHANICAL

H4001CG



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



- Meets IEEE 802.3 & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

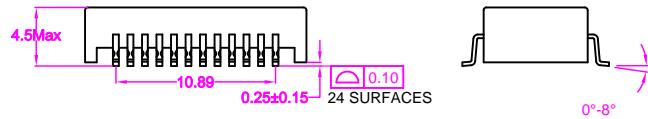
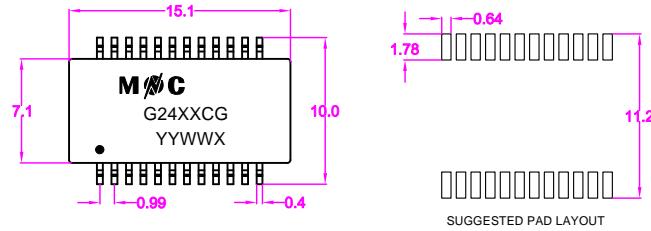


Electrical Specifications @25°C

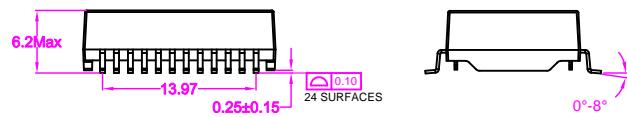
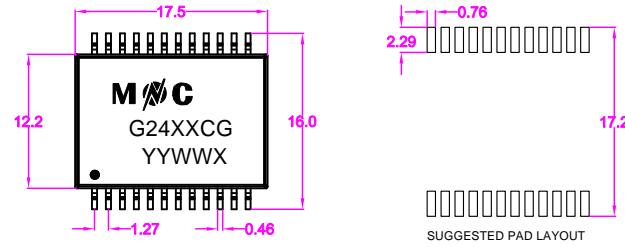
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz			
G2401CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	
G2405CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	
G2497CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	
G2480AG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

G2401CG



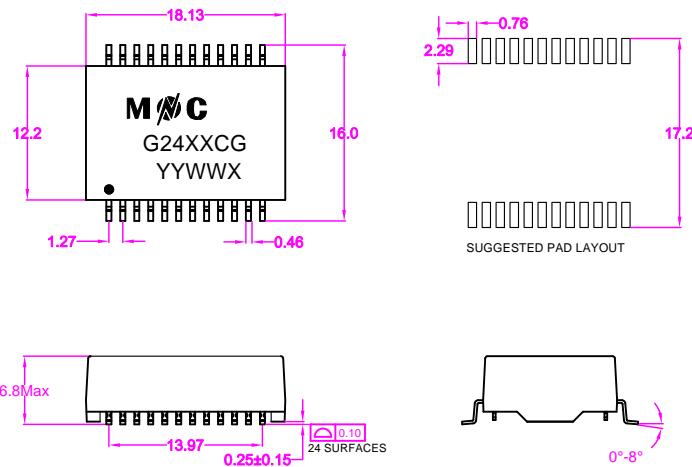
G2405CG



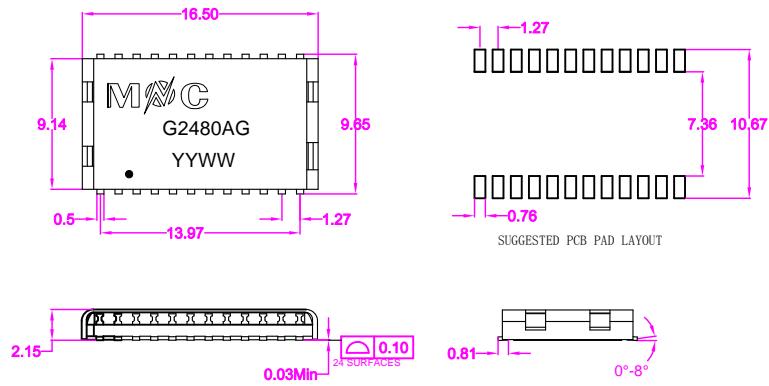
Unless otherwise specified all tolerances are:±0.25 in mm

MECHANICAL

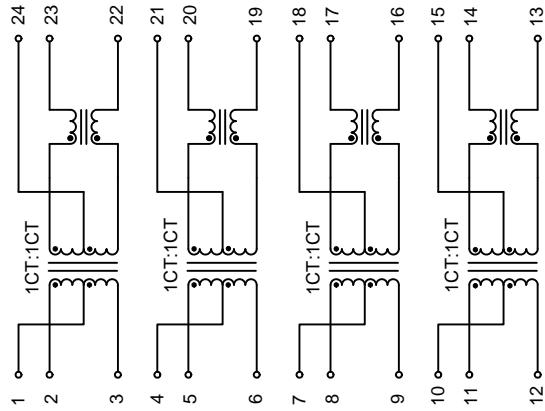
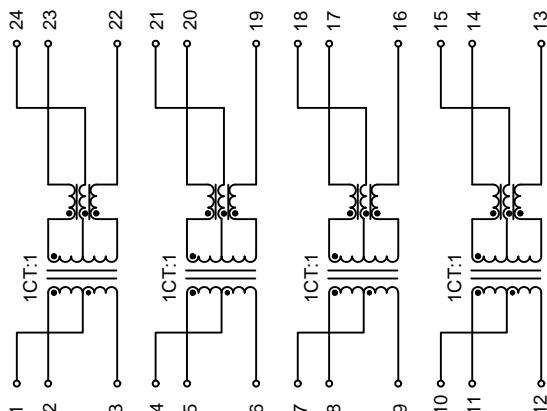
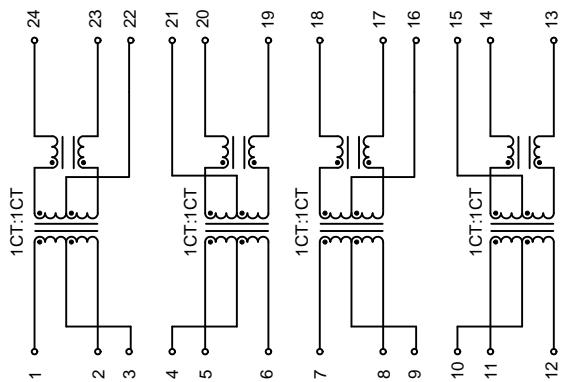
G2497CG



G2480AG



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS
G2401CG, G2405CG

G2497CG

G2480AG


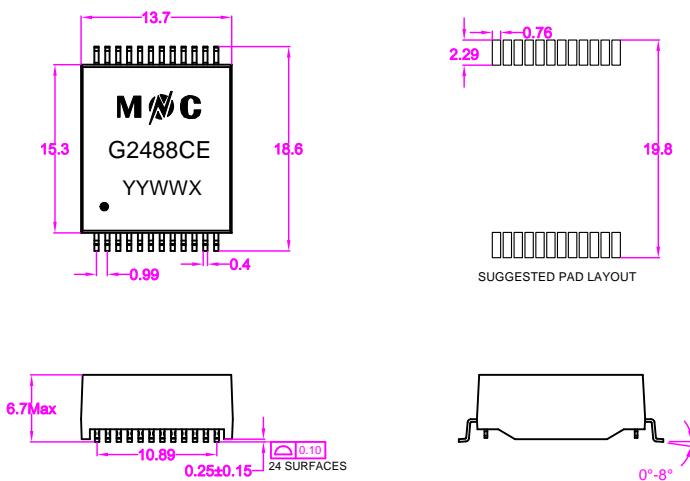
- Meets IEEE 802.3 & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: -40°C to +85°C.



Electrical Specifications @25°C

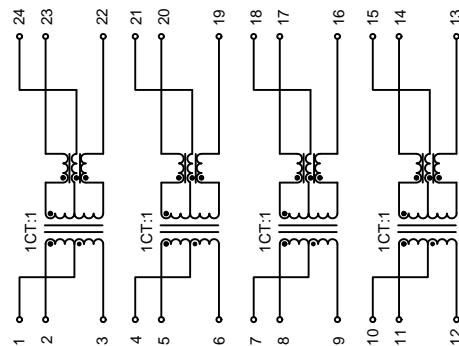
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz			
G2488CE	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



- Meets IEEE 802.3 & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

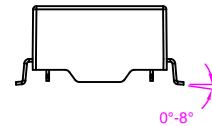
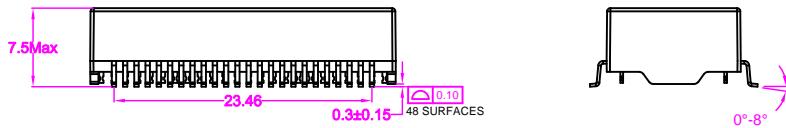
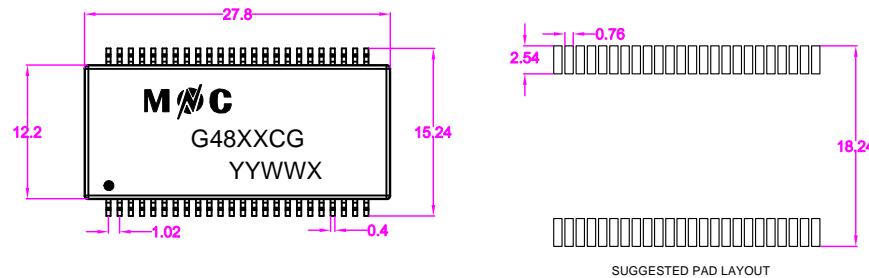


Electrical Specifications @25°C

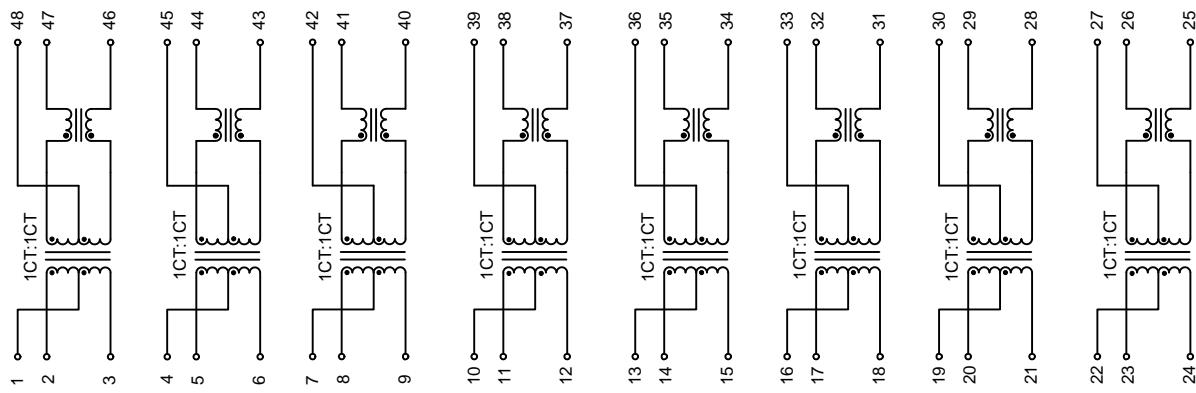
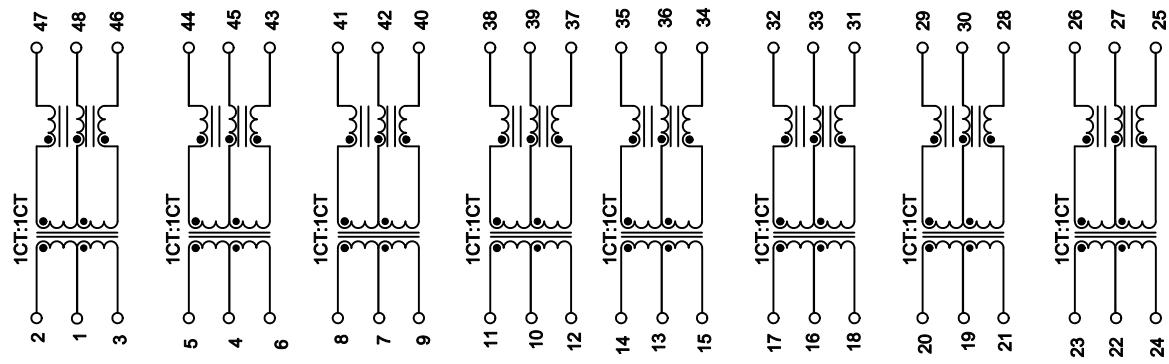
Part Number	OCL(uH)	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	100KHz,0.1Vrms, With 8mA DC Bias			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz		
G4802CG	350uH	1CT:1CT	-1.1	-18	$-18+20\log(f/30)$		-35	$-33+20\log(f/50)$	-30
G4812CG	350uH	1CT:1CT	-1.1	-18	$-18+20\log(f/30)$		-35	$-33+20\log(f/50)$	-30

MECHANICAL

G4802CG ,G4812CG



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS
G4802CG

G4812CG


- Meets IEEE 802.3 & ANSI X 3.263 Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.

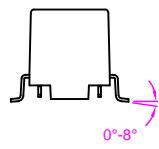
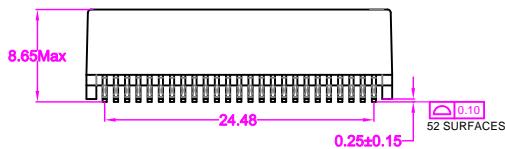
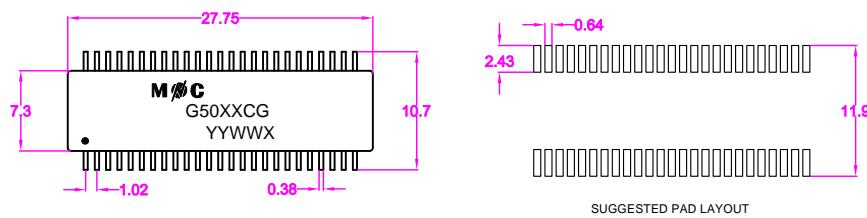


Electrical Specifications @25°C

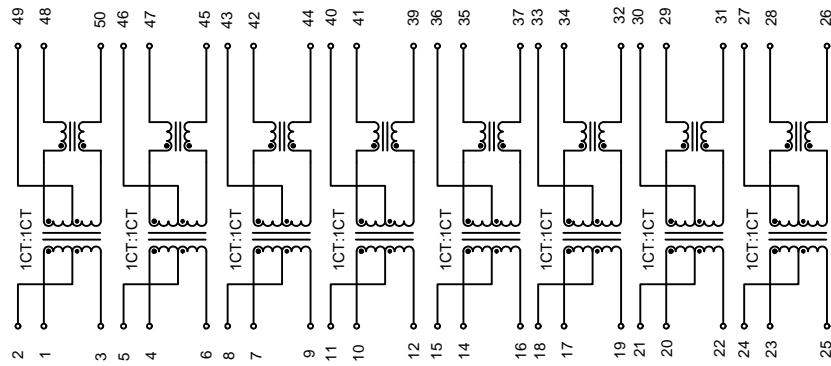
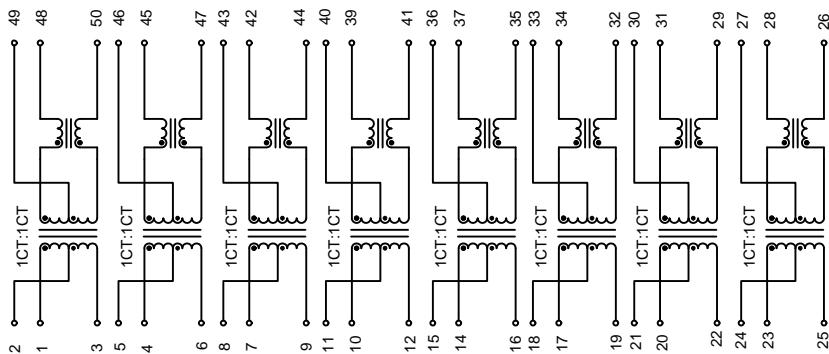
Part Number	OCL(uH) 100KHz,0.1Vrms, With 8mA DC Bias	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
			0.5-100MHz	0.5-40MHz	10.1-100MHz	0.5-40MHz	40.1-100MHz			
G5002CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	
G5007CG	350uH	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-35	-33+20*log(f/50)	-30	1500	

MECHANICAL

G5002CG ,G5007CG



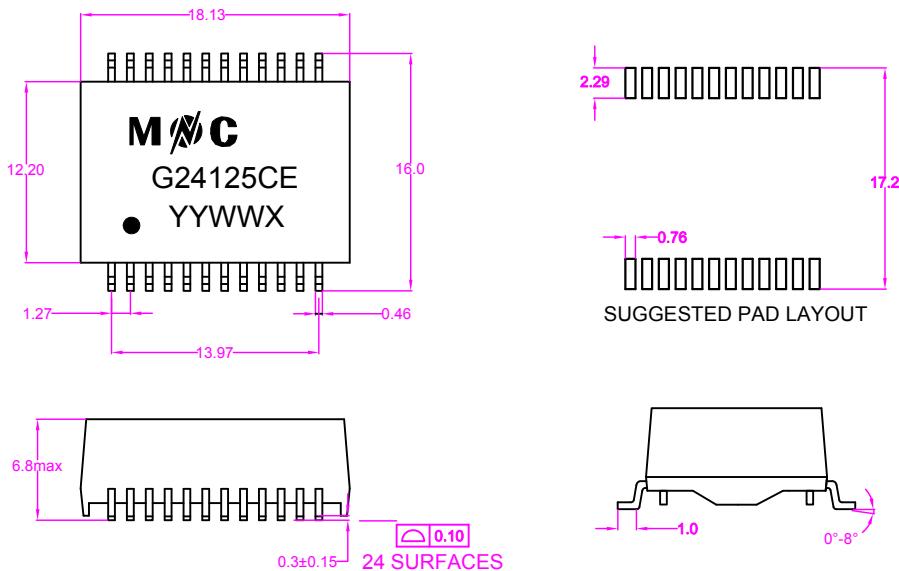
Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS
G5002CG

G5007CG


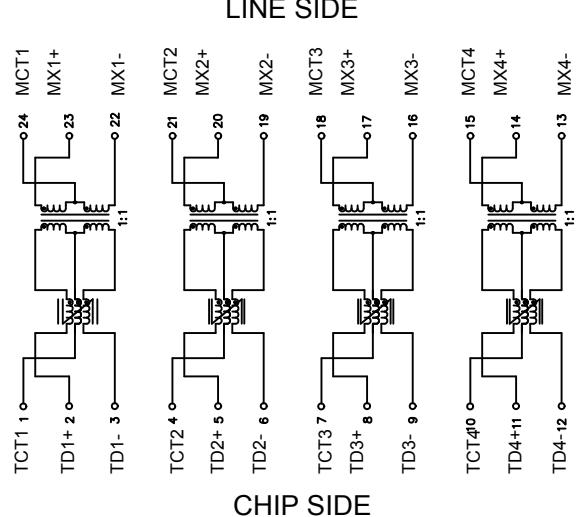
- Meets IEEE 802.3bz Standards.
- 2.5G Base-T, Surface Mount Type, Open Header .
- 720mA Current Capability Per POE Port/ Two-pair.
- RoHS Compliant.
- Operating temperature range: -40°C to +85°C.


Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz, 0.1V	Return Loss (dB Min) Z OUT = 100 OHM±15%		Cross talk (dB Min)		REJECTION RATIO COMMON MODE (dB Min)	
	With 15mA DC Bias	1-40MHz	40.1-200MHz	1-125MHz	125-200MHz	30-200MHz	
G24125CE	180	-20	-20+15*log(f/40)	-30	-22	-30	
	Continue		Turns Ratio (±2%)	Insertion Loss (dB Max)		DC RESISTANCE BALANCE	C _{WW} (pF TYP)
	DCR	CHIP(Ω max)		1-50M	50-125MHz	125-200MHz	±.05 OHMS MAX
	1.65	0.5	1CT:1CT	-0.5	-1.0	2.0	100 KHz, 0.2v CENTER TAP SYMMETRY

MECHANICAL


Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS


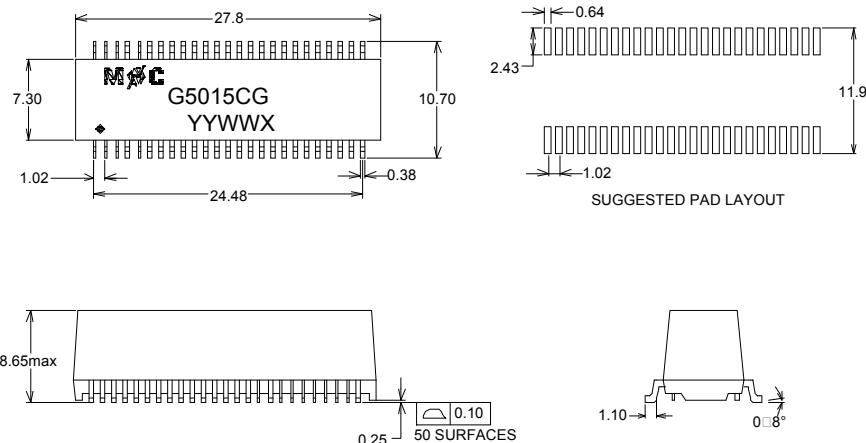
- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 1A Current Capability Per POE Port/Two Pairs.
- 2.5G Base-T, Surface Mount Type, Open Header.
- Operating temperature range: 0°C to +70°C .



Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz,0.2V	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 30-200MHz	Hi-POT (Vrms)
			1-125MHz	125-250MHz	1-40MHz	40-200MHz	1-100MHz	100-200MHz		
G5015CG	150	1CT:1CT	-1	-2	-16	-16+10*log(f/40)	-35	-25	-25	1500

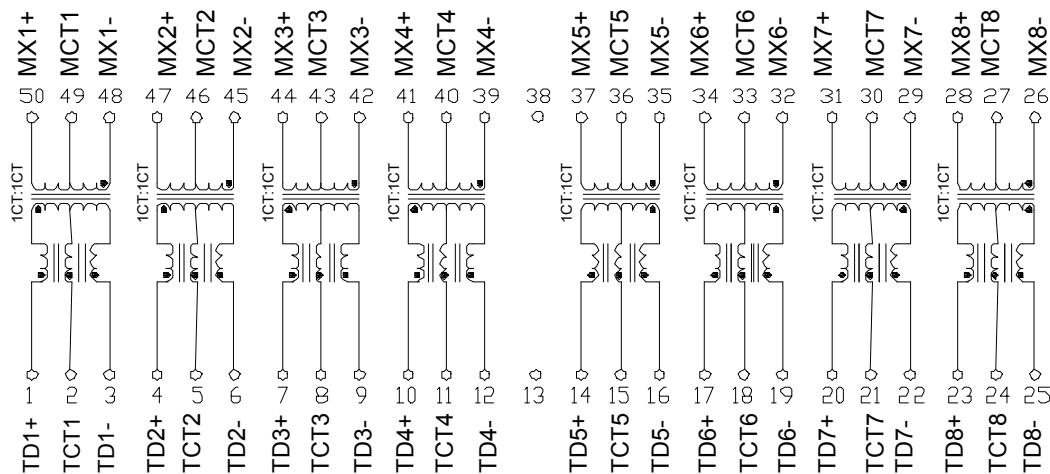
MECHANICAL



Unless otherwise specified all tolerances are: ±.25 in mm

SCHEMATICS

LINE SIDE



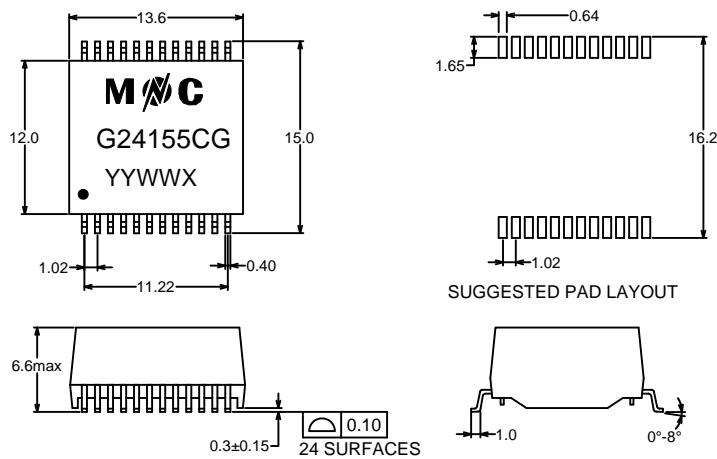
CHIP SIDE

- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 360mA Current Capability Per POE Port / Two-pair.



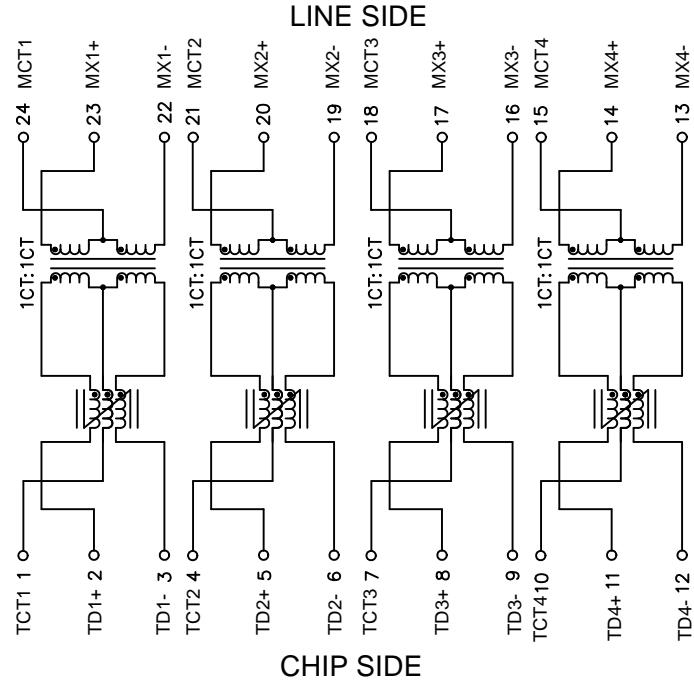
Part Number	Electrical Specifications @25°C											
	OCL(uH Min) @100KHz,0.1V	OCL(uH Min) @100KHz,0.1V With 10.8mA DC Bias	Turns Ratio ($\pm 2\%$)	Insertion Loss (dB Max)			Return Loss (dB Min)		Cross talk (dB Min)	CMRR (dB Min)	Hi-POT (Vrms)	
G24155CG	180	150	1CT:1CT	-0.5	-1.0	-1.5	-20	-20+12.5*log(f/40)	-30	-20	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS

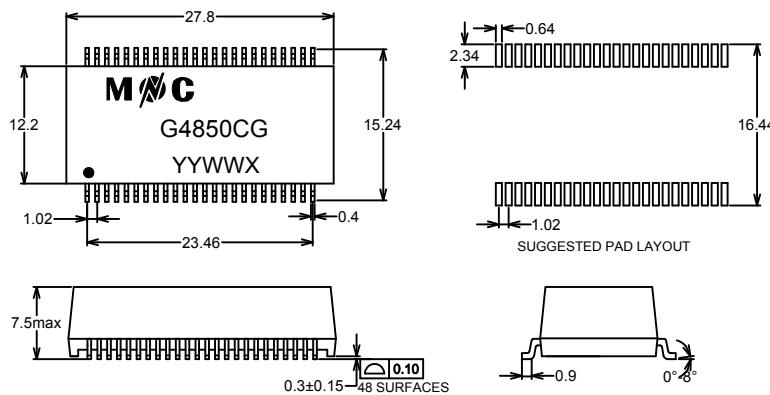


- Meets IEEE 802.3bz Standards.
- RoHS Compliant.
- 5G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- 1A Current Capability Per POE Port/Two Pairs



Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio	LK (uH max) 100KHz 0.2v	DCR (Ω Max) 25°C	Insertion Loss (dB Max)		Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.1-250MHz	HI-POT (Vrms) 2mA 60S	
					1-100MHz	375MHz	1-40MHz	40-375MHz	1-100MHz	100-375MHz			
G4850CG	120	1CT:1CT	0.5	1.4	-1.0	-1.5	-18	-17+10*log(f/40)	-40	-30	-30	-22	1500

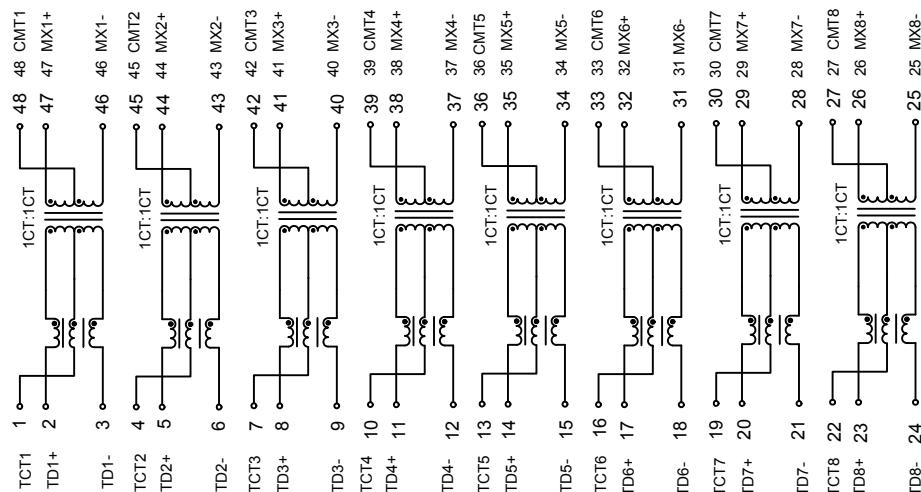
MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

LINE SIDE



CHIP SIDE

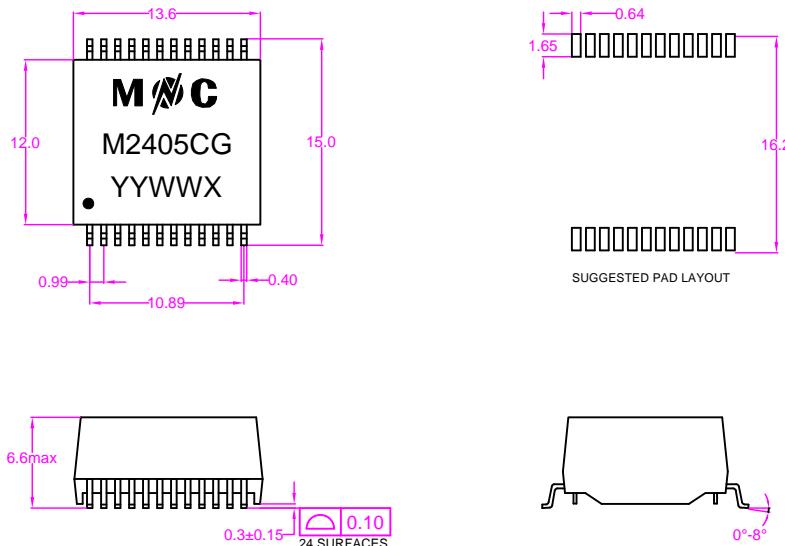
- Meets IEEE 802.3an Standards.
- RoHS Compliant.
- 10G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

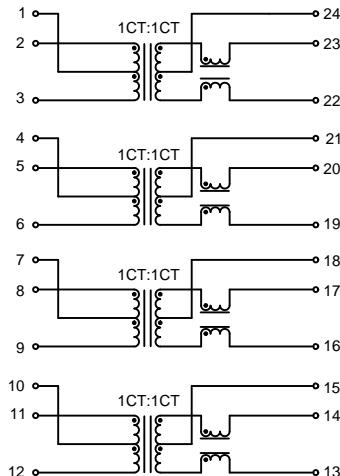
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
			100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
M2405CG	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10 ³ log(f/40)	-30	-22	-40	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



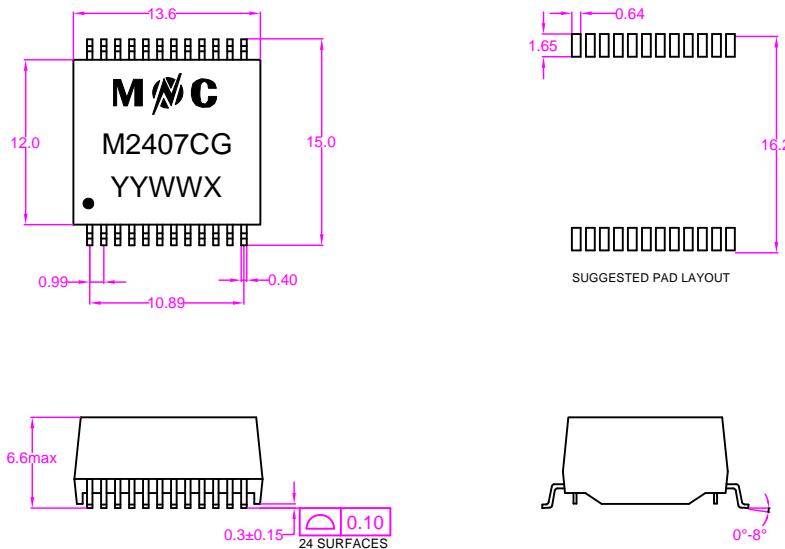
- Meets IEEE 802.3an Standards.
- RoHS Compliant.
- 10G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

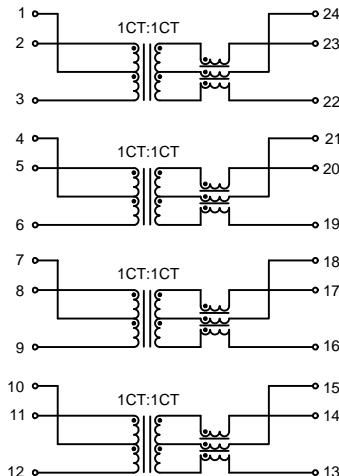
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
			100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
M2403CG	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10 ³ log(f/40)	-30	-22	-40	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



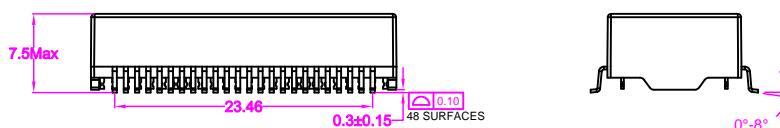
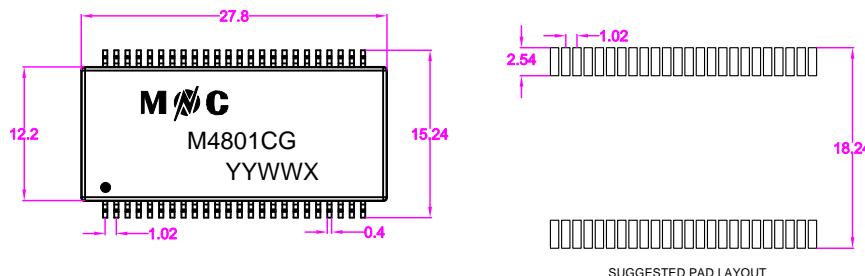
- Meets IEEE 802.3an Standards.
- RoHS Compliant.
- 10G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

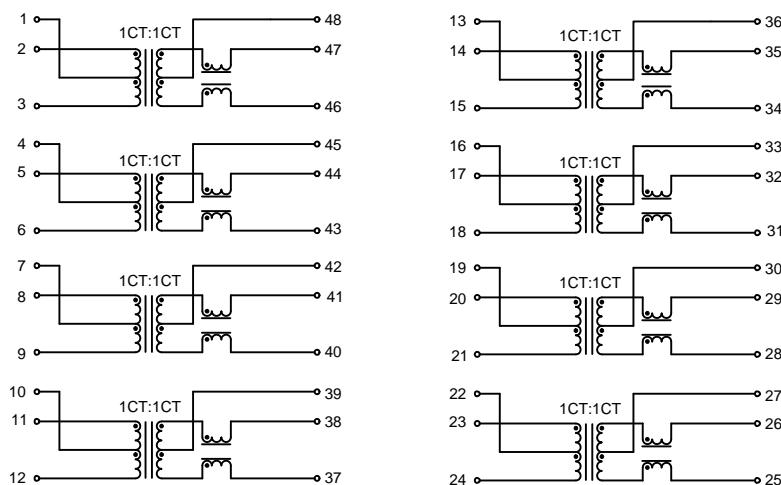
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio (±5%)	Insertion Loss (Max)			Return Loss (Max)		Common to Differential Mode Rejection (Max)		Cross talk (Max)		Hi-Pot (Vrms)
			100KHz	1-400MHz	500MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
M4801CG	120uH (Typ)	1CT:1CT	-3.0	-1.5	-3.0	-18	-17+10 ³ log(f/40)	-30	-22	-40	-30	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



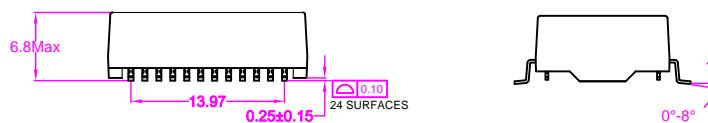
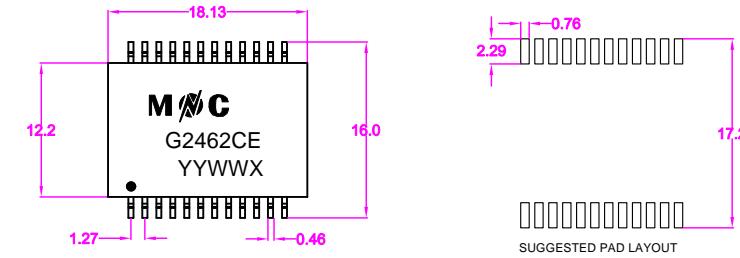
- Meets IEEE 802.3at & ANSI X3.263 Standards.
- Suitable For End-span and Mid-span PoE+ Applications.
- 10/100/1000 Base-T, Surface Mount Type, Open Header .
- 720mA Current Capability Per POE Port.
- RoHS Compliant.
- Operating temperature range: -40°C to +85°C.



Electrical Specifications @25°C

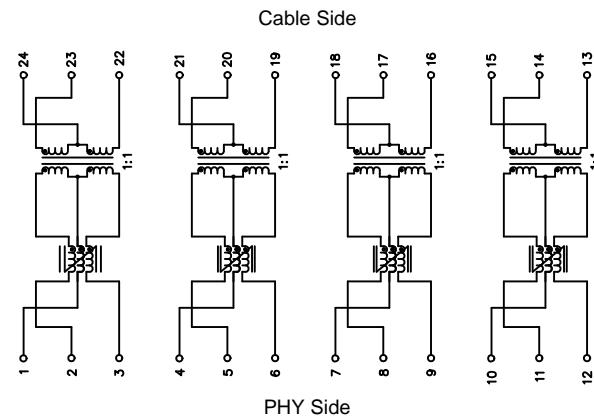
Part Number	OCL(uH Min) @100KHz, 0.1V With 21mA DC Bias@25°C	Return Loss (dB Min) (Z OUT = 100 OHM ±15%)		Cross talk (dB Min)		REJECTION RATIO	COMMON MODE(dB Min)
		1-40MHz	40.1-100MHz	1MHz	10-100MHz		
	350	-16	-10+20*log(f/80)	-50	-55+22*log(f/10)	-50	-15+20*log(f/200)
G2462CE	Continue						
	OCL(uH Min) @100KHz, 0.1V With 21mA DC Bias@-40°C&+85°C	Turns Ratio (±2%)		Insertion Loss (dB Max)	DC RESISTANCE BALANCE	C _{WW} (pF TYP)	HI-POT (Vrms)
	300	1CT:1CT	-1.2	-0.2-0.002*f~1.4	CENTER TAP SYMMETRY	25	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



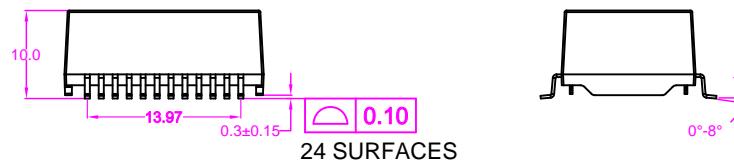
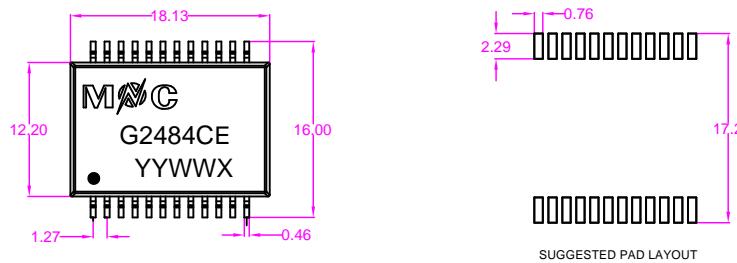
- Meets IEEE 802.3at & ANSI X3.263 Standards.
- Suitable For End-span and Mid-span PoE+ Applications.
- 10/100/1000 Base-T, Surface Mount Type, Open Header .
- 850mA Current Capability Per POE Port.
- RoHS Compliant.
- Operating temperature range: -40°C to +85°C.



Electrical Specifications @25 °C

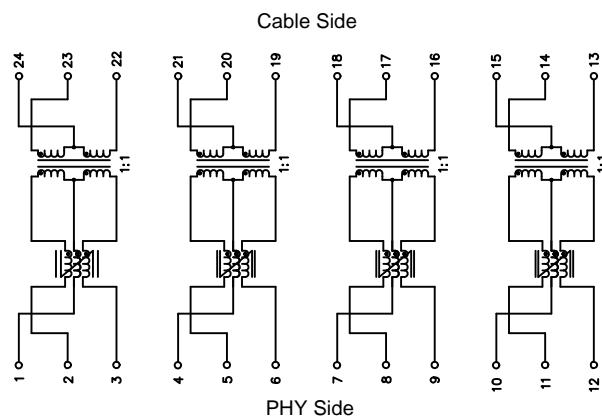
Part Number	OCL(uH Min) @100KHz, 0.1V With 25mA DC Bias@25°C	Return Loss (dB Min) (Z OUT = 100 OHM ±15%)		Cross talk (dB Min)		REJECTION RATIO	COMMON MODE(dB Min)
		1-40MHz	40.1-100MHz	1MHz	10-100MHz		
	350	-16	-10+20*log(f/80)	-50	-55+22*log(f/10)	-50	-15+20*log(f/200)
Continue							
G2484CE	OCL(uH Min) @100KHz, 0.1V With 25mA DC Bias@-40°C&+85°C	Turns Ratio (±2%)	Insertion Loss (dB Max)	DC RESISTANCE	BALANCE	C _{WW} (pF TYP)	HI-POT (Vrms)
	300	1CT:1CT	100KHz	1-125MHz	±.05 OHMS Max	1MHz	1500

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



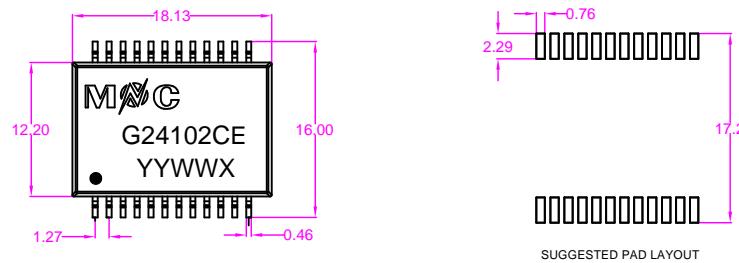
- Meets IEEE 802.3at & ANSI X3.263 Standards.
- Suitable For End-span and Mid-span PoE+ Applications.
- 10/100/1000 Base-T, Surface Mount Type, Open Header .
- 1150mA Current Capability Per POE Port.
- RoHS Compliant.
- Operating temperature range: -40°C to +85°C .



Electrical Specifications @25°C

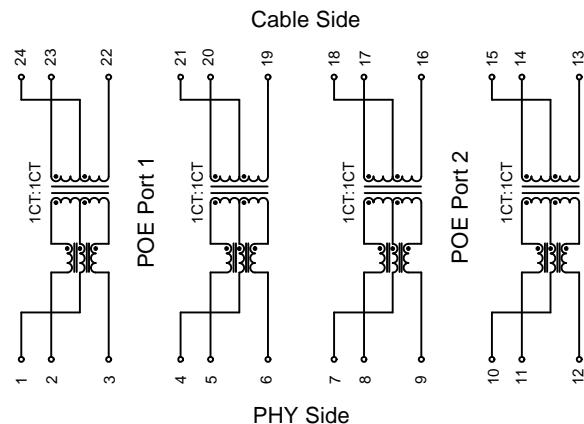
Part Number	OCL(uH Min) @100KHz, 0.1V With 25mA DC Bias@-40°C&+85°C	Return Loss (dB Min) (Z OUT = 100 OHM ±15%)		Cross talk (dB Min)		REJECTION RATIO	COMMON MODE(dB Min)	
		1-40MHz	40.1-100MHz	1MHz	10-100MHz			
	350	-16	-10+20*log(f/80)	-50	-55+22*log(f/10)	-50	-15+20*log(f/200)	
G24102CE	Continue							
	OCL(uH Min) @100KHz, 0.1V With 35mA DC Bias@-40°C&+85°C	Turns Ratio (±2%)	Insertion Loss (dB Max)	DC RESISTANCE	BALANCE	C _{WW} (pF TYP)	HI-POT (Vrms)	
	135	1CT:1CT	100KHz	1-125MHz	±.05 OHMS Max	1MHz	25	1500

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



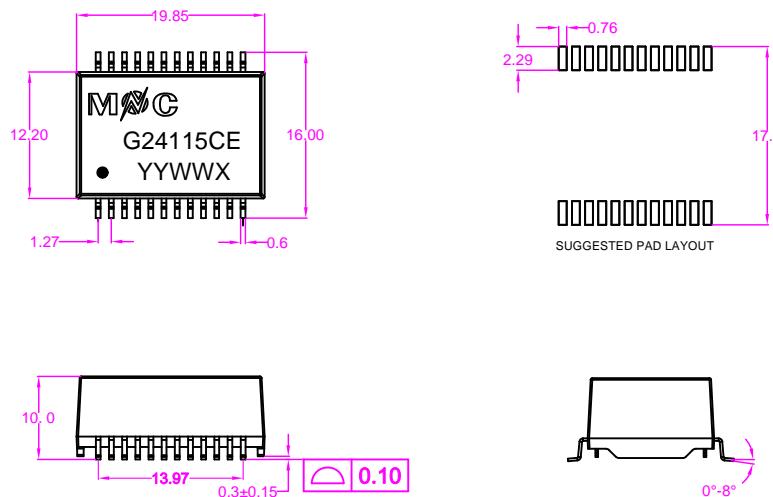
- Meets IEEE 802.3at & ANSI X3.263 Standards.
- Suitable For End-span and Mid-span PoE+ Applications.
- 10/100/1000 Base-T, Surface Mount Type, Open Header .
- 1500mA Current Capability Per POE Port.
- RoHS Compliant.
- Operating temperature range: -40°C to +85°C .



Electrical Specifications @25 °C

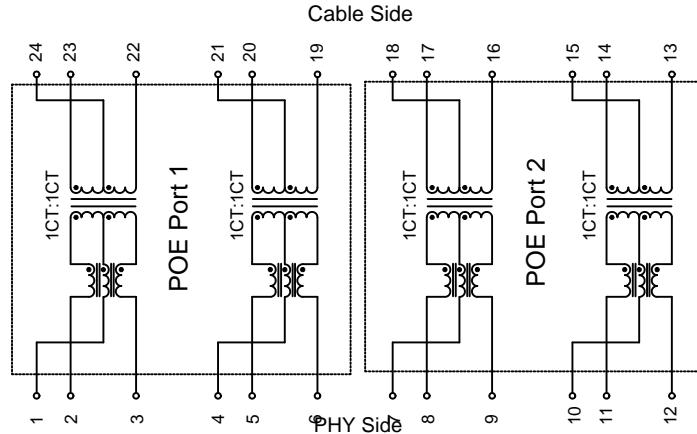
Part Number	OCL(uH Min) @100KHz, 0.1V With 45mA DC Bias@-40°C&+85°C	Return Loss (dB Min) (Z OUT = 100 OHM ±15%)		Cross talk (dB Min)		REJECTION RATIO	COMMON MODE(dB Min)	
		1-40MHz	40.1-100MHz	1MHz	10-100MHz			
G24115CE	200	-16	-10+20*log(f/80)	-50	-55+22*log(f/10)	-50	-15+20*log(f/200)	
	Continue							
	Turns Ratio (±2%)	Insertion Loss (dB Max)		DC RESISTANCE	BALANCE	C _{WW} (pF TYP)	HI-POT (Vrms)	
	1CT:1CT	100KHz	1-125MHz	±.05 OHMS Max	1MHz	25	1500	
		-1.2	-0.2-0.002*f~1.4	CENTER TAP SYMMETRY				

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



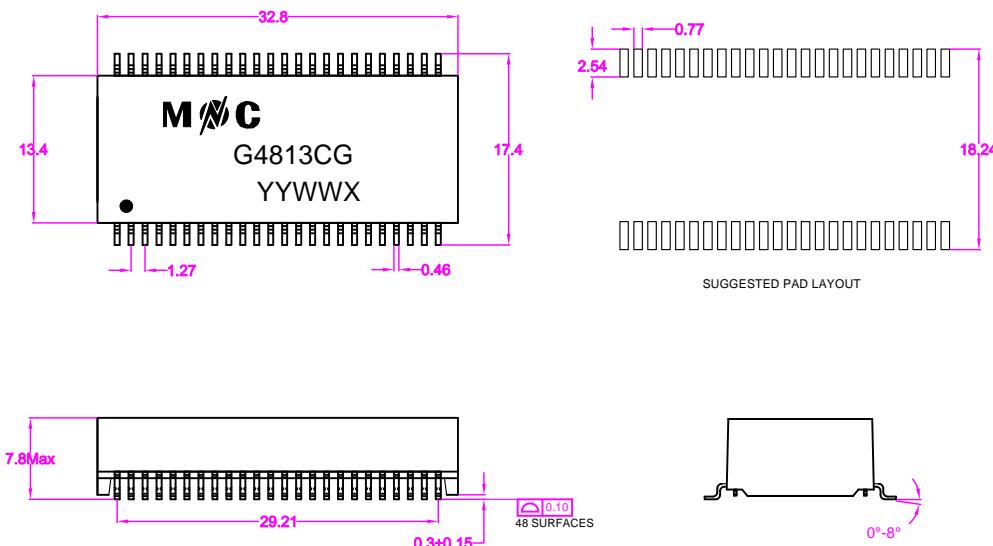
- Meets IEEE 802.3at & ANSI X3.263 Standards.
- Suitable For End-span and Mid-span PoE+ Applications.
- 10/100/1000 Base-T, Surface Mount Type, Open Header .
- 720mA Current Capability Per POE Port.
- RoHS Compliant.
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

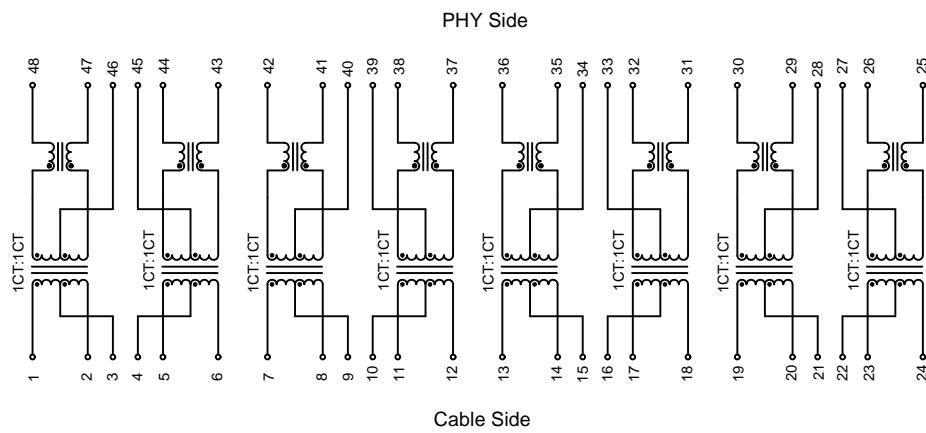
Part Number	OCL(uH Min) @100KHz, 0.1V With 21mA DC Bias@25°C	Return Loss (dB Min) (Z OUT = 100 OHM ±15%)		Cross talk (dB Min)		REJECTION RATIO	COMMON MODE(dB Min)
		1-40MHz	40.1-100MHz	1MHz	10-100MHz		
	350	-16	-10+20*log(f/80)	-50	-55+22*log(f/10)	-50	-15+20*log(f/200)
Continue							
G4813CG	Turns Ratio (±2%)		Insertion Loss (dB Max)		DC RESISTANCE	BALANCE	C _{WW} (pF TYP)
	100KHz		1-125MHz		±.05 OHMS Max	1MHz	HI-POT (Vrms)
	1CT:1CT	-1.2	-0.2-0.002*f~1.4		CENTER TAP SYMMETRY	25	1500

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



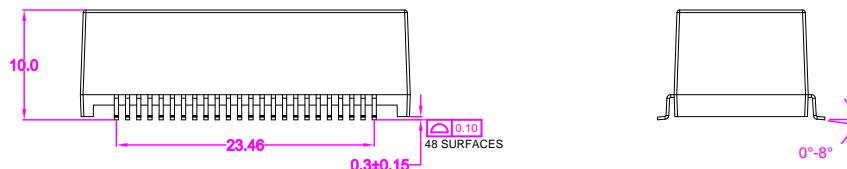
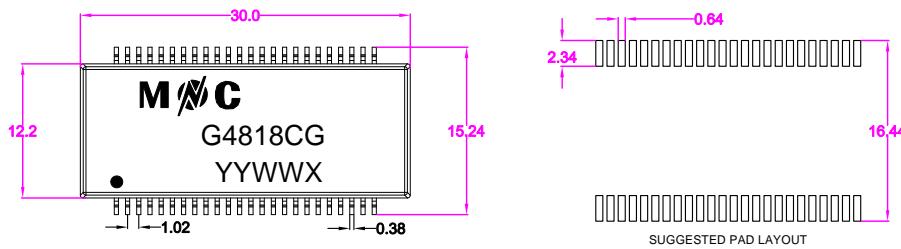
- Meets IEEE 802.3at & ANSI X3.263 Standards.
- Suitable For End-span and Mid-span PoE+ Applications.
- 10/100/1000 Base-T, Surface Mount Type, Open Header .
- 720mA Current Capability Per POE Port.
- RoHS Compliant.
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25 °C

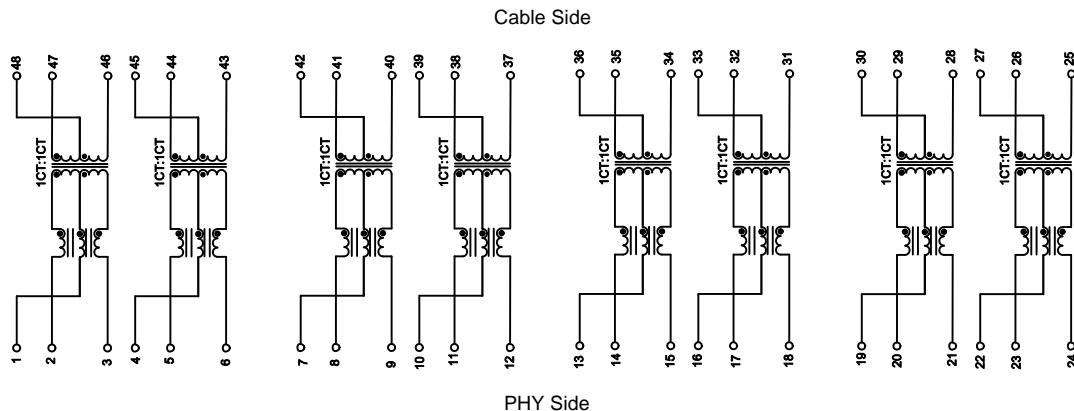
Part Number	OCL(uH Min) @100KHz, 0.1V With 21mA DC Bias@25°C	Return Loss (dB Min) (Z OUT = 100 OHM ±15%)		Cross talk (dB Min)		REJECTION RATIO	COMMON MODE(dB Min)
		1-40MHz	40.1-100MHz	1MHz	10-100MHz		
G4818CG	350	-16	-10+20*log(f/80)	-50	-55+22*log(f/10)	-50	-15+20*log(f/200)
	Continue						
	Turns Ratio (±2%)	Insertion Loss (dB Max)		DC RESISTANCE	BALANCE	C _{WW} (pF TYP)	HI-POT (Vrms)
	1CT:1CT	100KHz	1-125MHz	±.05 OHMS Max	1MHz	25	1500

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



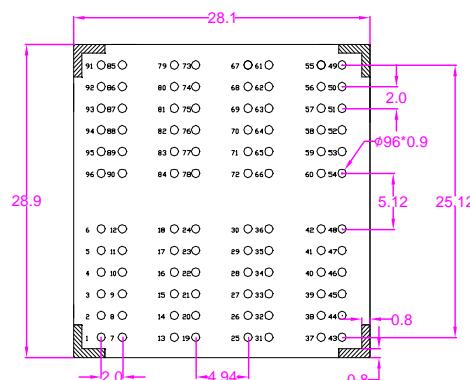
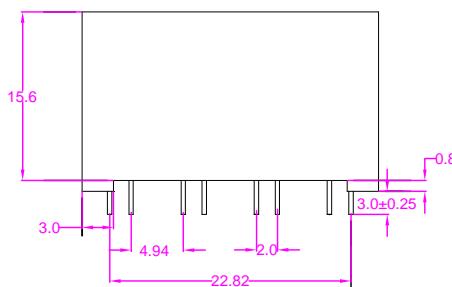
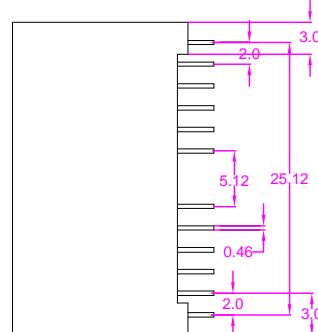
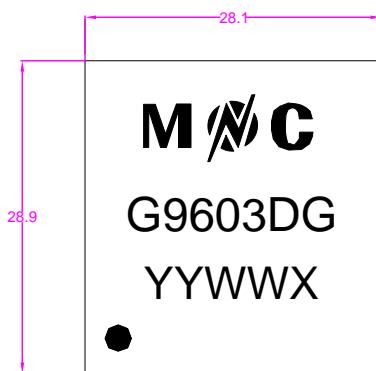
- Meets IEEE 802.3at & ANSI X3.263 Standards.
- Suitable For End-span and Mid-span PoE+ Applications.
- 100/1000 Base-T, Through-Hole Type.
- 700mA Current Capability Per POE Port.
- RoHS Compliant.
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

Part Number	OCL(uH Min) @100KHz, 0.1V With 25mA DC Bias@25°C	Return Loss (dB Min) (Z OUT = 100 OHM ±15%)		Cross talk (dB Min)		REJECTION RATIO	COMMON MODE(dB Min)
		1-40MHz	40.1-100MHz	1MHz	10-100MHz		
	350	-16	-10+20*log(f/80)	-50	-55+22*log(f/10)	-50	-15+20*log(f/200)
Continue							
G9603DG	Turns Ratio (±2%)		Insertion Loss (dB Max)		DC RESISTANCE	BALANCE	C _{WW} (pF TYP)
	100KHz		1-125MHz		±.05 OHMS Max	1MHz	HI-POT (Vrms)
	1CT:1CT	-1.2	-0.2-0.002*f~1.4		CENTER TAP SYMMETRY	25	1500

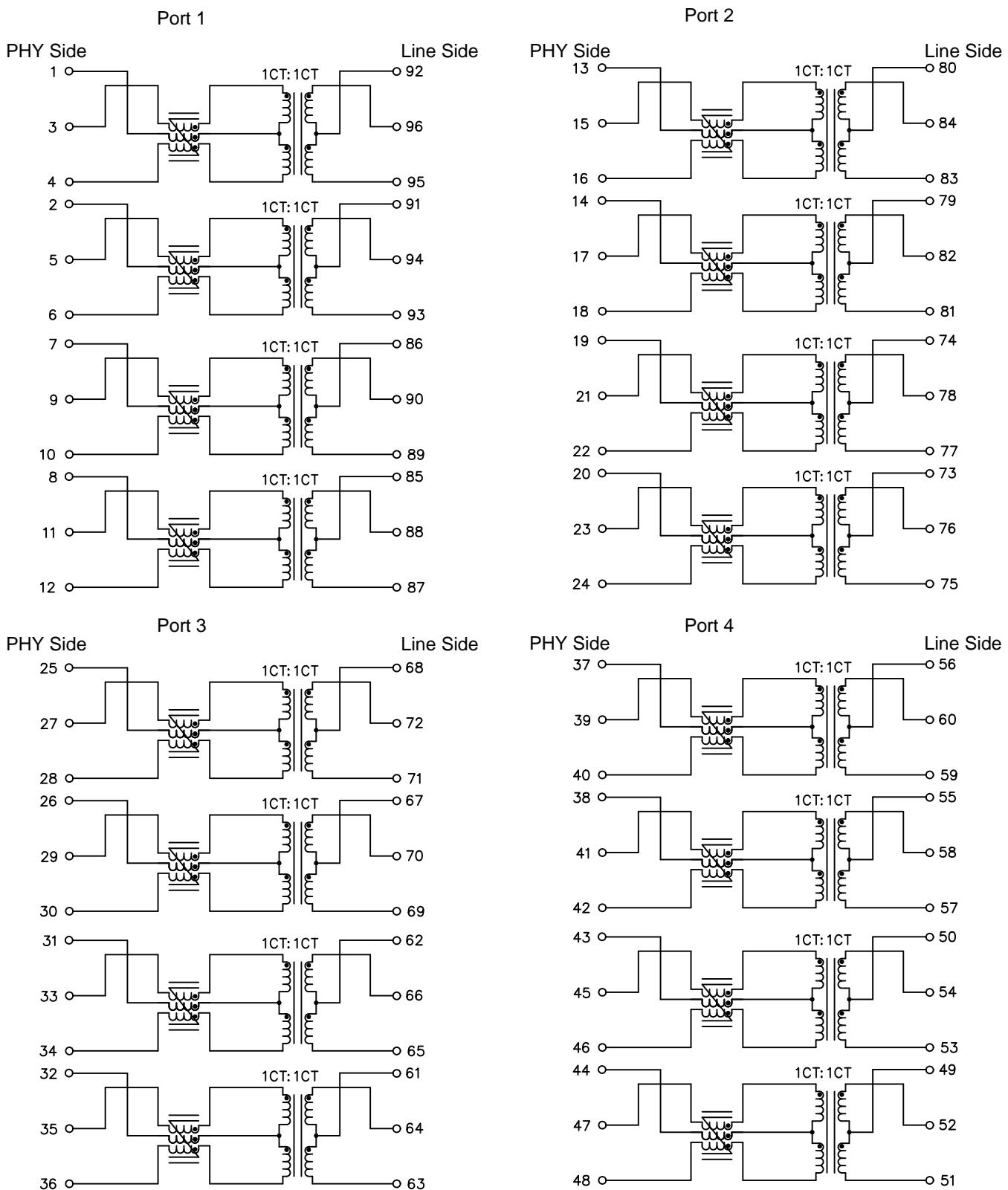
MECHANICAL



NO COMPONMENT AREA.
Suggested Customer PCB Layout
(Component Side)

SCHEMATICS

G9603DG



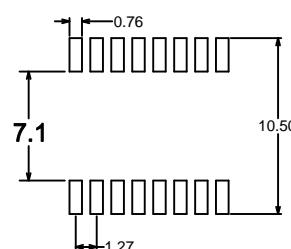
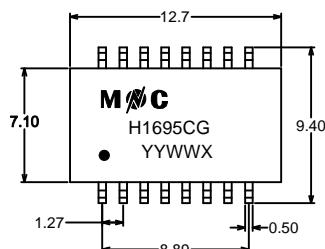
10/100 BASE-T SINGLE PORT SURFACE MOUNT MAGNETICS

- Meets IEEE 802.3u Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface mount Type, Open Header .
- Operating temperature range: 0°C to +70°C
- Pass 6KV surge(No breakdown during the test)

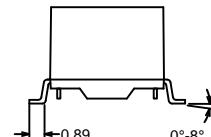


Electrical Specifications @25°C											
Part Number	OCL(uH Min) @100KHz,0.2V	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)			Cross talk (dB Min)	CMRR (dB Min)	HI-POT (Vrms)		
	With 8mA DC Bias			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz	40.1-100MHz		
H1695CG	350	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-	-12	-35	-33+20*log(f/50)	-30	3000

MECHANICAL

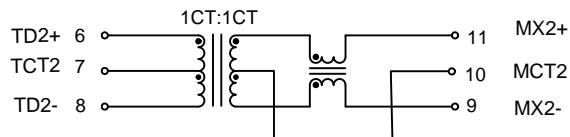
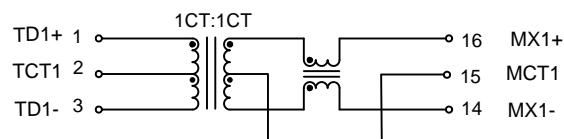


SUGGESTED PAD LAYOUT



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

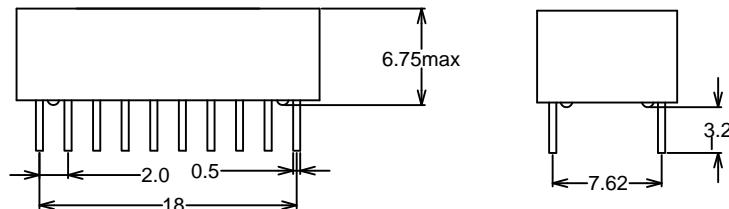
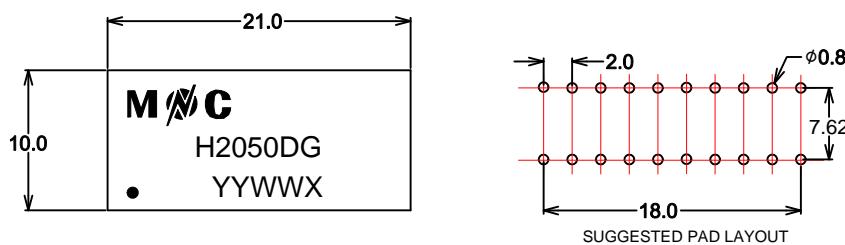


- Meets IEEE 802.3u Standards.
- RoHS Compliant.
- 10/100 Base-T, Surface mount Type, Open Header .
- Operating temperature range: 0°C to +70°C
- Pass 6KV surge(No breakdown during the test)



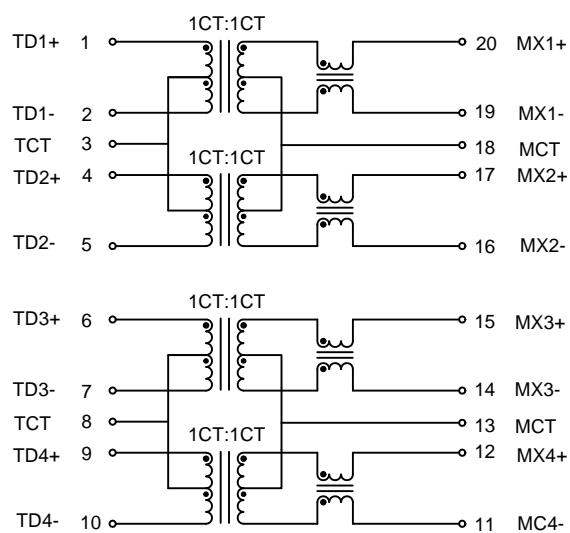
Electrical Specifications @25°C										
Part Number	OCL(uH Min) @100KHz,0.2V	Turns Ratio ($\pm 5\%$)	Insertion Loss (dB Max)	Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min)	
	With 8mA DC Bias			0.5-100MHz	0.5-30MHz	30.1-60MHz	60.1-80MHz	0.5-40MHz		
H2050DG	350	1CT:1CT	-1.1	-18	-18+20*log(f/30)	-12	-35	-33+20*log(f/50)	-30	4000

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS



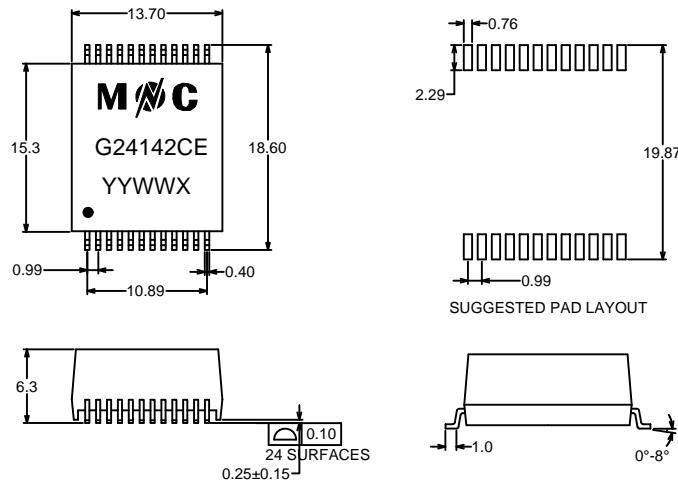
- Meets IEEE 802.3ab Standards.
- RoHS Compliant.
- 10/100/1000 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: -40°C to +85°C.
- Pass 6KV surge(No breakdown during the test)



Electrical Specifications @25°C

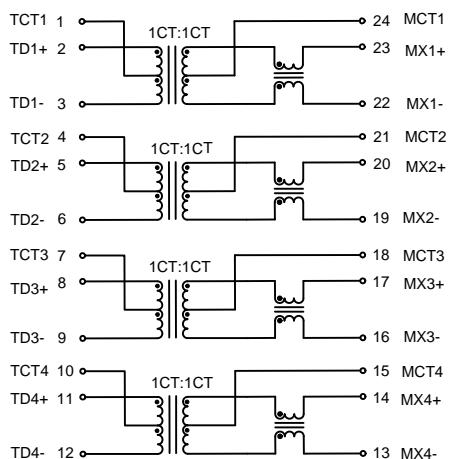
Part Number	OCL(uH Min) @100KHz,0.2V	Turns Ratio (±5%)	Insertion Loss (dB Max)		Return Loss (dB Min)			Cross talk (dB Min)		CMRR (dB Min)	HI-POT (Vrms)
	With 8mA DC Bias		0.5-100MHz	125MHz	0.5-40MHz	40.1-100MHz	0.5-40MHz	40.1-100MHz	0.5-100MHz		
G24142CE	350	1CT:1CT	-1.1	-1.6	-18	-12+20*log(f/80)	-35	-30	-30	3000	

MECHANICAL



Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS

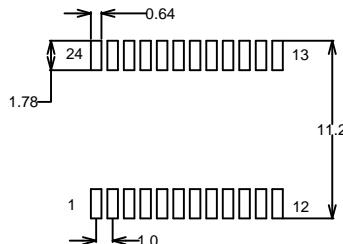
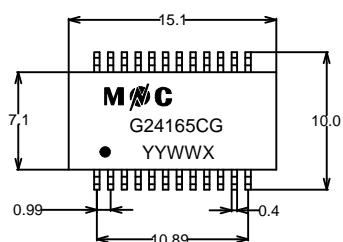


- Meets IEEE 802.3ab Standards.
- RoHS Compliant.
- 100/1000 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C .
- Pass 6KV surge(No breakdown during the test)

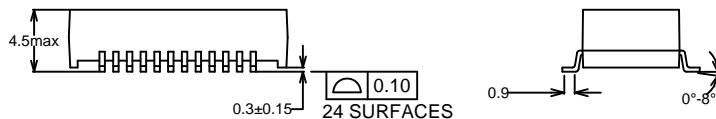


Electrical Specifications @25°C										
Part Number	OCL(uH Min) @100KHz,0.2V	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)	
	With 8mA DC Bias			0.5-100MHz	0.5-40MHz	40.1-100MHz	0.5-40MHz			
G24165CG	350	1CT:1CT	-1.1	-18	-12+20*log(f/80)		-35	-30	-30	3000

MECHANICAL

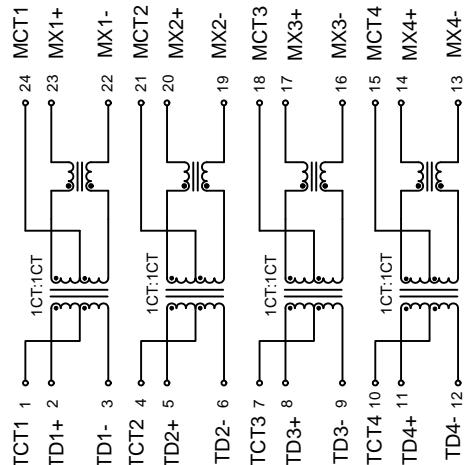


SUGGESTED PAD LAYOUT

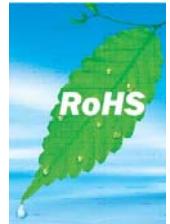


Unless otherwise specified all tolerances are:±0.25 in mm

SCHEMATICS



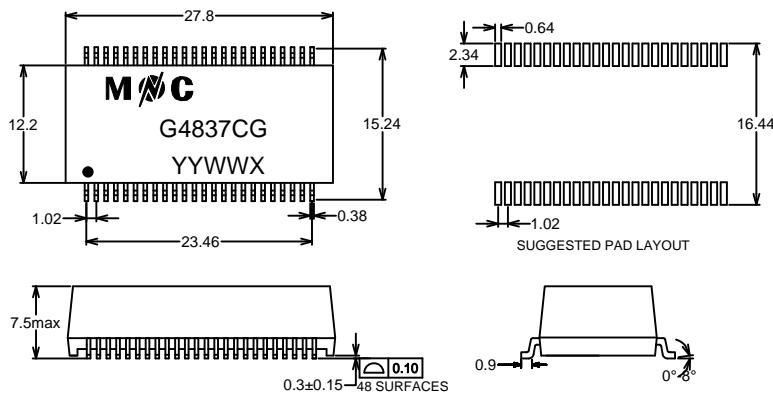
- Meets IEEE 802.3ab Standards.
- RoHS Compliant.
- 10/100/1000 Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C
- Pass 6KV surge(No breakdown during the test)



Electrical Specifications @25°C

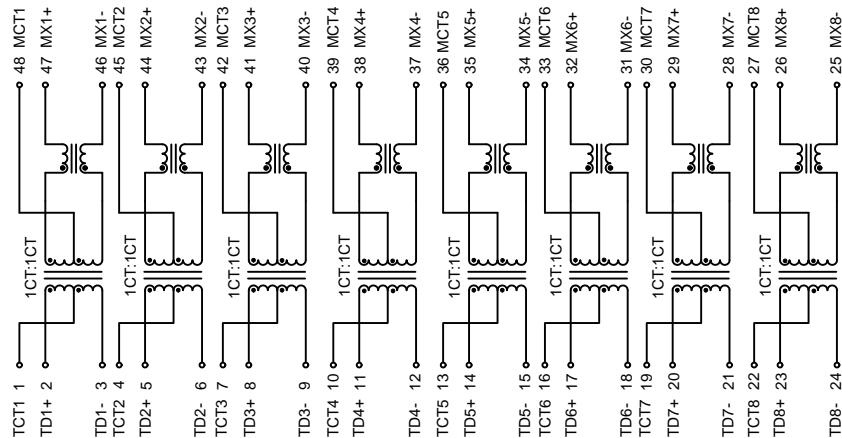
Part Number	OCL(uH Min) @100KHz,0.2V	Turns Ratio (±5%)	Insertion Loss (dB Max)	Return Loss (dB Min)		Cross talk (dB Min)		CMRR (dB Min) 0.5-100MHz	HI-POT (Vrms)
	With 8mA DC Bias			0.5-100MHz	0.5-40MHz	40.1-100MHz	0.5-40MHz		
G4837CG	350	1CT:1CT	-1.1	-18	-12+20*log(f/80)	-35	-33+20*log(f/50)	-30	3000VAC

MECHANICAL



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS



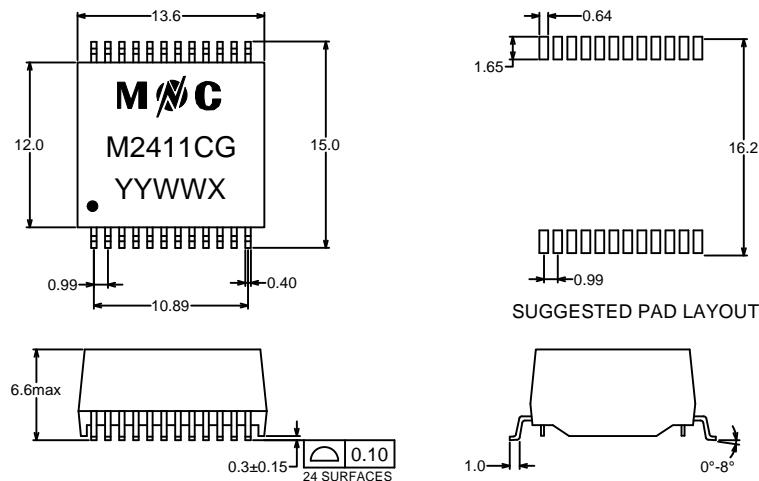
- Meets IEEE 802.3an Standards.
- RoHS Compliant.
- 10G Base-T, Surface Mount Type, Open Header .
- Operating temperature range: 0°C to +70°C.
- Pass 6KV surge(No breakdown during the test)



Electrical Specifications @25°C

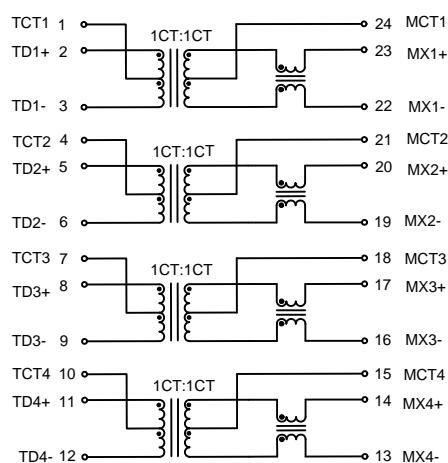
Part Number	OCL(uH Min) @100KHz,0.1V	Turns Ratio ($\pm 5\%$)	Insertion Loss (MAX)		Return Loss (MIN)		Common to Differential Mode Rejection (MIN)		Cross talk (MIN)		Hi-Pot (Vrms)
			100KHz	1-400MHz	1-40MHz	40-500MHz	1-250MHz	250-500MHz	1-100MHz	100-500MHz	
M2411CG	120uH	1CT:1CT	-3.0	-1.5	-18	-17+10*log(f/40)	-30	-22	-40	-30	3000

MECHANICAL



Unless otherwise specified all tolerances are: ± 0.25 in mm

SCHEMATICS



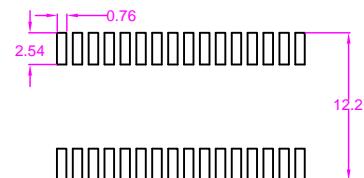
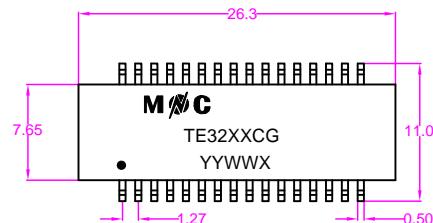
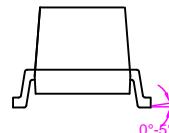
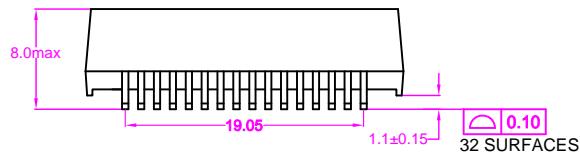
- Octal SMT Package contains both transmit and receive transformers
- Models matched to leading transceivers
- RoHS Compliance
- Operating temperature range: 0°C to +70°C.



Electrical Specifications @25°C

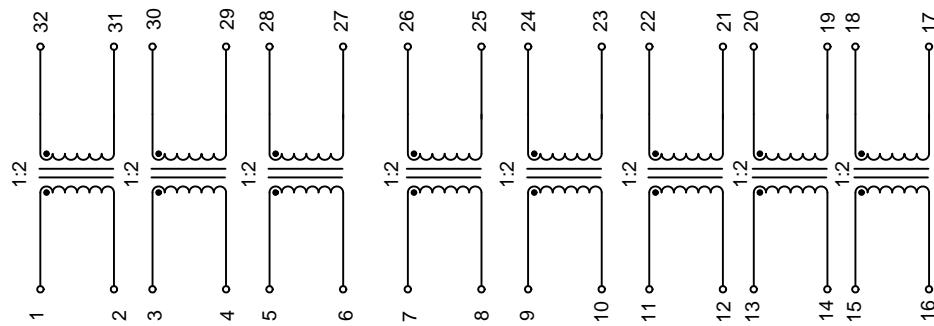
Part Number	OCL(mH Min) @10KHz,0.1V	Turns Ratio (±2%)	LL (uH MAX)	Cww (pF MAX)	DCR (Ω MAX)	Primary Pins		Hi-Pot (Vrms)
		Pri:Sec	100KHz,0.2V	100KHz,0.2V	Pri	Transmit	Receive	
TE3202CG	1.2	1:2	0.6&0.6	30&30	1.2	1-2,5-6,9-10,13-14	3-4,7-8,11-12,15-16	1500

MECHANICAL

TE3202CG

SUGGESTED PAD LAYOUT


Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

TE3202CG


- Octal SMT Package contains both transmit and receive transformors
- Models matched to leading transceivers
- RoHS Compliance
- Operating temperature range: 0°C to +70°C.

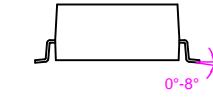
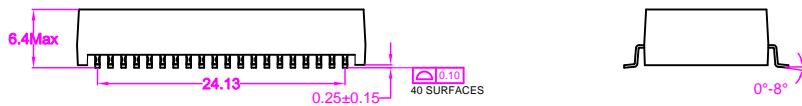
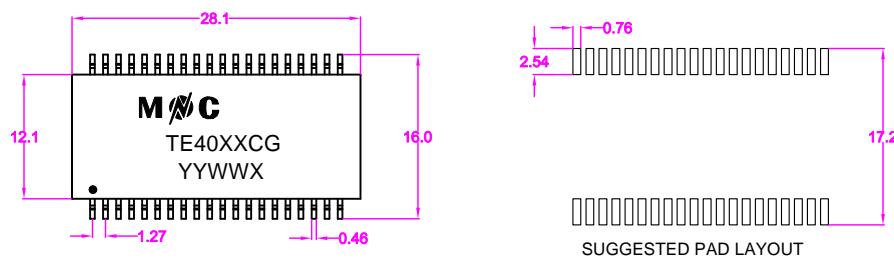


Electrical Specifications @25°C

Part Number	OCL(mH Min) @10KHz,0.1V	Turns Ratio (±2%)	LL (uH MAX)	Cww (pF MAX)	DCR (Ω MAX)	Primary Pins		Hi-Pot (Vrms)
		Pri:Sec	100KHz,0.2V	100KHz,0.2V	Pri	Transmit	Receive	
TE4001CG	1.2&1.2	1:2CT	0.8&0.8	35&35	0.8	4-5,9-10,14-15,19-20	24-25,29-30,34-35,39-40	1500
TE4008CG	1.2&1.2	1CT:2&1:2CT	0.6&0.6	35&35	1.2	4-5,9-10,14-15,19-20	1-3,6-8,11-13,16-18	1500
TE4016CG	1.2&1.2	1:2.4&1:1	0.5&0.5	35&35	1.5	1-2,8-9,11-12,18-19	3-4,6-7,13-14,16-17	1500
TE4027CG	1.2	1:1.266	0.7 & 0.7	35&35	1.2	1-2,6-7,11-12,16-17	3-4,8-9,13-14,18-19	1500

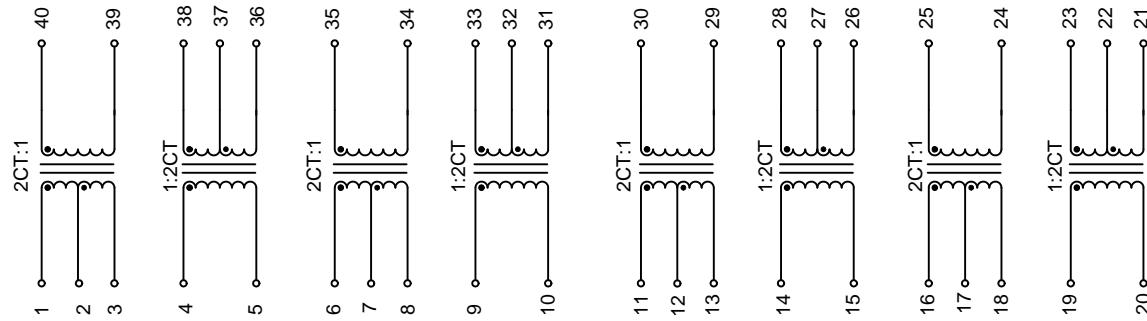
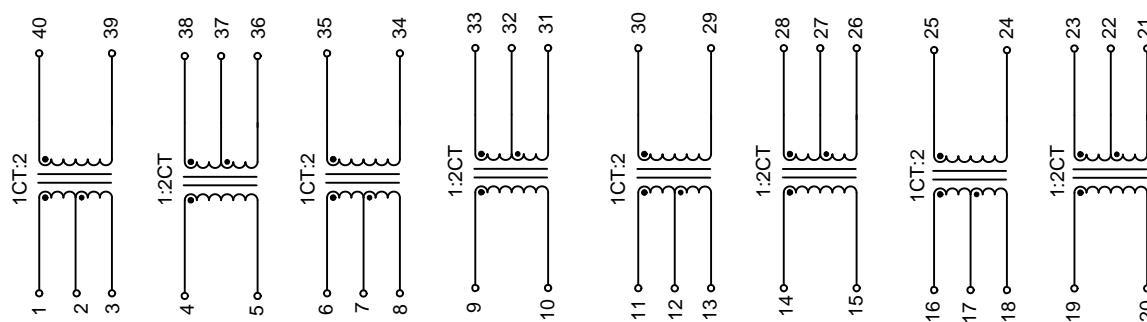
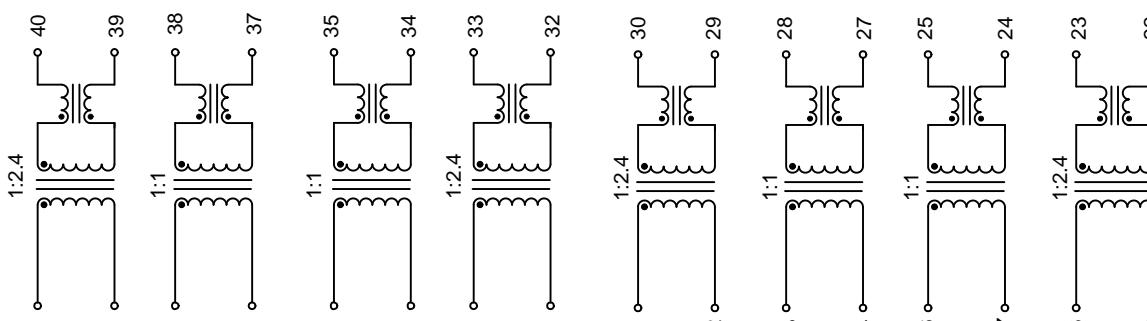
MECHANICAL

TE4001CG,TE4008CG,TE4016CG,TE4027CG



Unless otherwise specified all tolerances are: ±0.25 in mm

SCHEMATICS

TE4001CG

TE4008CG

TE4016CG

TE4027CG
