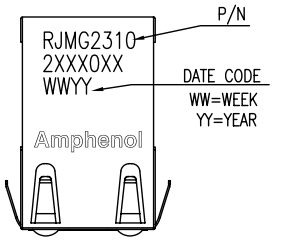
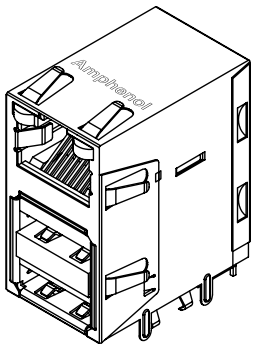
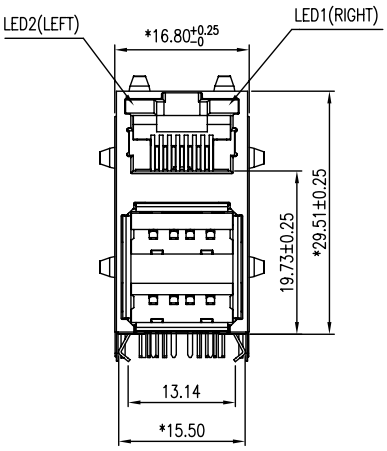
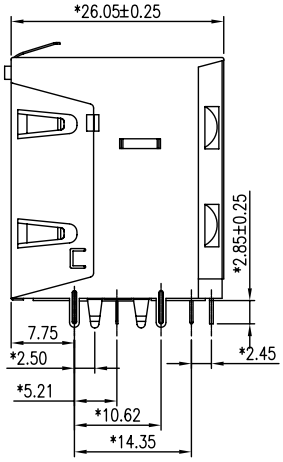
CUSTOMER DRAWING

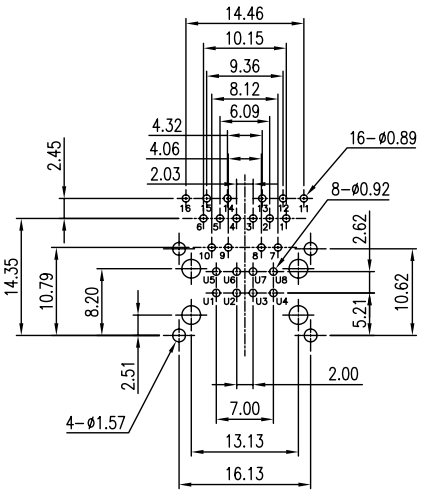
REVISIONS				
SYM	ECN No.	DESCRIPTION	DATE	APPROVED
B1		CHANGE THE P/N MATRIX	01/03/2005	John De Jong











RECOMMENDED PCB LAYOUT
(ALL TOLERANCES ARE ±0.05)

TOLERANCE m/m		APPROVALS	DATE
x.	±0.30	DRAWN Lucy Lee	01/03/05
x.x	±0.25	CHECKED Kevin Xie	01/03/05
x.xx	±0.15	APPROVED Joseph Hsu	01/03/05
x.xxx	±0.08		
ANGULAR	±1°		
UNLESS OTHERWISE SPECIFIED		UNIT MM	

TITLE: RJMG 1000 BASE T OVER STACKED USB

Amphenol®
Amphenol Corporation

SCALE 2:1 | SHEET 1 OF 4

SIZE	PART NO.	DRAWING NO.	REV.
A4	RJMG23102XXX0XX	RJMG23102XXX0XX	B1

CUSTOMER DRAWING

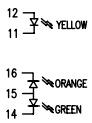
REVISIONS				
SYM	ECN No.	DESCRIPTION	DATE	APPROVED
B1		CHANGE THE P/N MATRIX	01/03/2005	John De Jong

PIN	SYMBOL
1	GND
2	T/R1+
3	T/R1−
4	T/R2+
5	T/R2−
6	COMMON CT
7	T/R3+
8	T/R3−
9	T/R4+
10	T/R4−

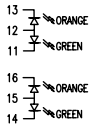
GIGA BIT RJMG PINOUT

PIN	SYMBOL
1	VCC
2	−DATA
3	+DATA
4	GROUND
5	VCC
6	−DATA
7	+DATA
8	GROUND

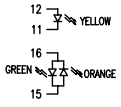
STACKED USB PINOUT



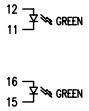
RJMG2310228X0XX



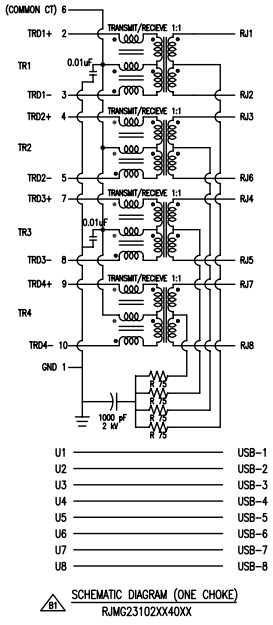
RJMG2310288X0XX



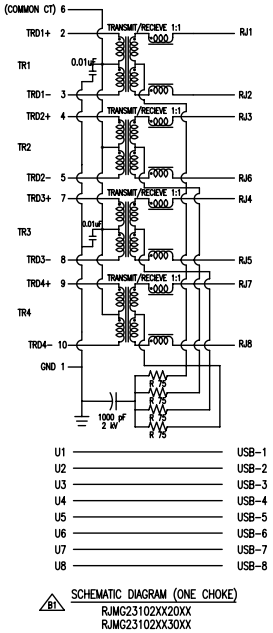
RJMG2310226X0XX



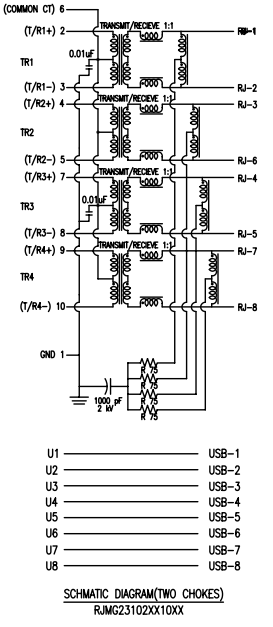
RJMG2310211X0XX



B1 SCHEMATIC DIAGRAM (ONE CHOKE)
RJMG23102XX40XX



B1 SCHEMATIC DIAGRAM (ONE CHOKE)
RJMG23102XX20XX
RJMG23102XX30XX



SCHMATIC DIAGRAM(TWO CHOKES)
RJMG23102XX10XX

APPROVALS	DATE
DRAWN Lucy Lee	01/03/05
CHECKED Kevin Xie	01/03/05
APPROVED Joseph Hsu	01/03/05

TITLE: RJMG 1000 BASE T OVER STACKED USB

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SCALE N.A. | SHEET 2 OF 4

UNIT: MM | SIZE: A4 | PART NO.: RJMG23102XXX0XX | DRAWING NO.: RJMG23102XXX0XX | REV.: B1

CUSTOMER DRAWING

REVISIONS				
SYM	ECN No.	DESCRIPTION	DATE	APPROVED
B1		RELEASE TO PRODUCTION	01/03/2005	John De Jong

ELECTRICAL SPECIFICATION(@25° C)

LED PERFORMANCE

PARAMETER	SINGLE COLOUR		BICOLOUR				UNITS
	GREEN	YELLOW	GREEN	YELLOW	GREEN	ORANGE	
FORWARD CURRENT IF MAX	30	30	30		30		mA
REVERSE CURRENT IR MAX	10	10	10		10		uA
REVERSE VOLTAGE VR MAX	-5	-5	-5		-5		V
T OPERATURE	-40~+85	-40~+85	-40~+85		-40~+85		℃
T SOLDERING	260+/-5	260+/-5	260+/-5		260+/-5		℃
POWER DISS. Pd	100	100	100		100		mW
INTENSITY Iv	45 Min	15 Min	20 Min	30 Min	20 Min	30 Min	MCD (@IF=20mA)
PEAK WAVELENTH	565	585	565	585	565	605	nM
FORWARD VOLTAGE TYP	2.5	2.1	2.2	2.1	2.2	2.0	V (@IF=20mA)
FORWARD VOLTAGE MAX	2.9	2.6	2.6	2.6	2.6	2.6	V (@IF=20mA)

CONNECTOR PERFORMANCE

PARAMETER	LIMITS (MAX. OR MIN.)	FREQUENCY RANGE/ TEST CONDITIONS
INSERTION LOSS (RX/TX)	-1.0dB MAX. -1.2dB MAX.	0.1-100 MHz 100-125 MHz
RETURN LOSS (RX/TX)	-16dB MIN. -10+20 log(f/80MHz)dB MIN.	0.5-40 MHz 40-100 MHz
CM-CM REJECTION	-30dB MIN.	100KHz-100MHz
CM-DM REJECTION	-35dB MIN.	100KHz-100MHz
CROSSTALK ISOLATION (RX/TX)	-30+20 log(f/100MHz)dB MIN.	100KHz-100MHz
HIPOT (ISOLATION)	1.5kVrms MIN.	60S
OCL	350uH MIN.	100KHz 100mV 8mA
TURN RATIO	1:1±5%	

TOLERANCE m/m		APPROVALS	DATE
x.	±0.30	DRAWN Lucy Lee	01/03/05
x.x	±0.25	CHECKED Kevin Xie	01/03/05
x.xx	±0.15	APPROVED Joseph Hsu	01/03/05
x.xxx	±0.08		
ANGULAR	±1°		
UNLESS OTHERWISE SPECIFIED		UNIT MM	

TITLE: RJMG 1000 BASE T OVER STACKED USB

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SCALE N.A. | SHEET 3 OF 4

SIZE	PART NO.	DRAWING NO.	REV.
A4	RJMG23102XXX0XX	RJMG23102XXX0XX	B1

CUSTOMER DRAWING

REVISIONS				
SYM	ECN No.	DESCRIPTION	DATE	APPROVED
B1		RELEASE TO PRODUCTION	01/03/2005	John De Jong

MATERIALS:

INSULATOR: THERMOPLASTIC POLYESTER,
COLOR: BLACK
FLAMMABILITY RATING UL 94V-0

CONTACTS (RJMAG): PHOSPHOR BRONZE
PLATING: SELECTIVE GOLD OVER MATING SURFACES.
100 MICROINCHES BRIGHT TIN ON TAILS OR 100 MICROINCHES SN/PB ALLOY

SHIELD: COPPER ALLOY T=0.2MM,TIN/LEAD 100u" MIN OR NICKEL 50u"MIN
OR STAINLESS STEEL.

DIMENSIONS MARKED WITH "*" SHALL BE MEASURED.

MECHANICAL FEATURES:

SOLDERABILITY: MIL-STD-202,METHOD 208.

MATING/UNMATING FORCE:

USB PORT INSERTION 3.5Kg MAX
REMOVAL 1.0Kg MIN

RJ PORT MATING/UNMATING 2.1Kg MAX

RETENTION FORCE FOR RJ PORT: 5Kg FOR 1 MINUTE

PACKAGING: MEET FCC PART 68.500 REQUIREMENTS.

ENVIRONMENTAL:

OPERATING TEMPERATURE:0°C TO +70°C.

STORAGE TEMPERATURE:-40°C TO +105°C.

SOLDERING TEMPERATURE: 220°C FOR 10 SECONDS

ALTITUDE OPERATING RANGE: SEA LEVEL TO 3000m

Humidity: per MIL-STD-1344A,method 1002.1, test condition B

Thermal Shock: per MIL-STD-1344A,method 1003.1, test condition A

Vibration: per MIL-STD-1344A,method 2005.1, test condition II

Mechanical Shock: per MIL-STD-1344A,method 2004.1, test condition C

Salt Spray: 24 hours per MIL-STD-1344A,method 1001.1, test condition B

RJMG-2310 - 2 X- X X- 0 X X

LED1 (RIGHT SIDE)
1: Green
2: Yellow
4: Bi color Green/Yellow
6: Bi color Green/Orange
8: Bi-color Green/Orange(3 leads)

TERMINATION OPTIONS
1: 4*75R,1000pf 12cores
2: 4*75R,1000pf 8cores version 1
3: 4*75R,1000pf 8cores version 1
4: 4*75R,1000pf 8cores version 2

LED2 (LEFT SIDE) SEE LED1 OPTIONS

PLATING AND PACKAGE

0: Gold Flash,Copper Alloy Shield with Sn/Pb 100u inches.Tray
1: Gold 15u Inches,Copper Alloy Shield with Sn/Pb 100u inches,Tray
2: Gold 30u Inches,Copper Alloy Shield with Sn/Pb 100u inches,Tray

C: Gold Flash, Stainless steel shield, Tray
D: Gold 15u Inches, Stainless steel shield, Tray
E: Gold 30u Inches, Stainless steel shield, Tray

L: Gold Flash,Copper Alloy Shield with Nickel 50u inches, Tray
M: Gold 15u Inches, Copper Alloy Shield with Nickel 50u inches, Tray
N: Gold 30u Inches, Copper Alloy Shield with Nickel 50u inches, Tray

NONE RoHS Complince

COMPLIANCE CODE
BLANK: NONE-RoHS
R: RoHS Compliant

TOLERANCE m/m	
x.	±0.30
x.x	±0.25
x.xx	±0.15
x.xxx	±0.08
ANGULAR	±1°
UNLESS OTHERWISE SPECIFIED	

APPROVALS		DATE
DRAWN	Lucy Lee	01/03/05
CHECKED	Kevin Xie	01/03/05
APPROVED	Joseph Hsu	01/03/05

UNIT: MM

TITLE: RJMG 1000 BASE T OVER STACKED USB

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SCALE N.A. SHEET 4 OF 4

SIZE	PART NO.	DRAWING NO.	REV.
A4	RJMG23102XXX0XX	RJMG23102XXX0XX	B1