

REVISIONS			
REV	DATE	DESCRIPTION	BY
1B		PRELIMINARY	AMC
1C		ON APPROVAL	AMC
1D		REV OF 1C	AMC

MATERIALS:

PLASTIC HOUSING: THERMOPLASTIC NYLON
COLOUR: BLACK
FLAMMABILITY RATING UL94V-0

CONTACTS (RJ45): PHOSPHOR BRONZE
PLATING: 50 MICRONCHES [1.27 MICRONS] GOLD OVER 50 MICRONCHES [1.27 MICRONS] MIN. NICKEL ON MATING SURFACES;
100 MICRONCHES [2.54 MICRONS] TIN/LEAD ALLOY ON CONTACT TAILS.

CONTACTS (USB): PHOSPHOR BRONZE
PLATING: GOLD OVER NICKEL ON MATING SURFACE
TIN/LEAD ALLOY ON CONTACT TAILS

SHIELD: COPPER ALLOY
PLATING: TIN-LEAD ALLOY.

R J M G - 7 3 X X - X X - 0 1

RJ45, WITH TERMINATION CIRCUIT
OVER STACKED USB (SINGLE PORT ONLY)
SHIELDED WITH TOP AND SIDE TABS

LED1 (RIGHT SIDE)

0- NO LED (BLOCKED HOLE)
1- GREEN
2- YELLOW
3- RED
4- GREEN/YELLOW
5- RED/GREEN
6- GREEN/ORANGE
7- RED/YELLOW

LED2 (LEFT SIDE)

0- NO LED (BLOCKED HOLE)
1- GREEN
2- YELLOW
3- RED
4- GREEN/YELLOW
5- RED/GREEN
6- GREEN/ORANGE
7- RED/YELLOW

1- 1:1
2- 1.25:1
3- 2:1
4- 2:1
6- 1:2
7- 1:2 special 10/100 BASE T
8- 1:2 10/100 BASE T
9- 1:2 10 BASE T low inductance

TERMINATION OPTIONS

3: 4 X75 OHM RESISTORS, 68 pf (2Kv)
4: 2X75 OHM RESISTORS, 68 pf (2Kv)
5: 2X75 OHM RESISTORS, 68 pf (2Kv)
6: 3X75 OHM RESISTORS, 68pf (2Kv)
7: 4X75 OHM RESISTORS, 1000pf (2Kv)
8: 4X75 OHM RESISTORS, 1000pf (2Kv)
9: 4X75 OHM RESISTORS, 1000pf (2Kv)
SPECIAL PIN OUT FOR CHIP 82559.
SPECIAL: 4X75 OHM RESISTORS, 1000pf (2Kv) SPECIAL (SEE SCHEMATIC SHEET 3)
NOTE: TERMINATION OPTIONS "7", "9", "A" AND "B" ONLY AVAILABLE FOR 1:1 TURN RATIO.

DATE	APPROVALS	DATE	APPHENOL CANADA CORP.
JULY 2006	L.K.	JULY 2006	STACKED RJ45 USB COMBO
03554			P-RJ45-7300-XX-01 1D RJ45-USB 1 OF 3

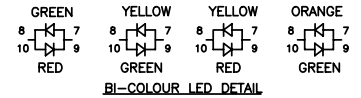
ELECTRICAL SPECIFICATION (@25°C), TURN RATIO: 1:1, 1.25:1, √2:1 AND 2:1

INSERTION LOSS	0.8dB TYP.	1.0dB MAX.	1-100MHz
RETURN LOSS	-22dB TYP.	-18dB MIN.	1-30MHz
	-18dB TYP.	-16dB MIN.	30-60MHz
	-12dB TYP.	-10dB MIN.	60-100MHz
OCL	400uH TYP.	350uH MIN.	100KHz ,8mA DC BIAS
DC RESISTANCE	0.5ohm TYP.	1.0ohm MIN.	DC
CM TO CM REJECTION	40dB TYP.	38dB MIN.	0-100MHz
CM TO DM REJECTION	40dB TYP.	35dB MIN.	0-100MHz
HIPOT (ISOLATION)	2.25KV	2.25KV	DC
CROSSTALK (PAIR TO PAIR)	-38dB TYP.	-35dB MIN.	0-100MHz
	-60dB TYP.	-50dB MIN.	0-100MHz (LED TO Tx/Rx)
COMMON MODE IMPEDANCE	3.5Kohm TYP.	3Kohm MIN.	0-10MHz
	575ohm TYP.	550ohm MIN.	10-100MHz

ELECTRICAL SPECIFICATION (@25°C), TURN RATIO: 1:√2 AND 1:2

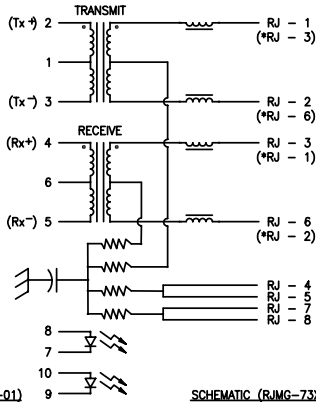
INSERTION LOSS	0.8dB TYP.	1.0dB MAX.	1-10MHz
RETURN LOSS	-20dB TYP.	-16dB MIN.	1-10MHz
OCL RECEIVE	400uH TYP.	350uH MIN.	100KHz ,8mA DC BIAS
OCL TRANSMIT	35uH TYP.	28uH MIN.	100KHz ,8mA DC BIAS
DC RESISTANCE	0.5ohm TYP.	1.0ohm MIN.	DC
CM TO CM REJECTION	40dB TYP.	38dB MIN.	0-100MHz
CM TO DM REJECTION	40dB TYP.	35dB MIN.	0-100MHz
HIPOT (ISOLATION)	2.25KV	2.25KV	DC
CROSSTALK (PAIR TO PAIR)	-38dB TYP.	-35dB MIN.	0-100MHz
	-60dB TYP.	-50dB MIN.	0-100MHz (LED TO Tx/Rx)
COMMON MODE IMPEDANCE	3.5Kohm TYP.	3Kohm MIN.	0-10MHz
	575ohm TYP.	550ohm MIN.	10-100MHz

REVISIONS			
REV.	DATE	DESCRIPTION	BY
10		CHG. SYMBOLS	DL
9		ADD PINS TO PINOUT	DL



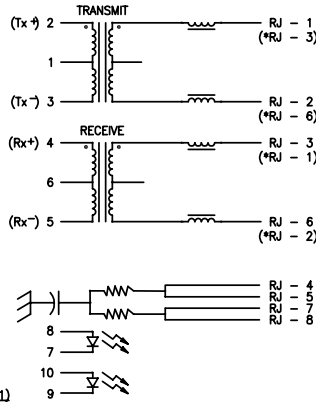
PINOUT

PIN	SYMBOL
1	Tct
2	Tx+
3	Tx-
4	Rx+
5	Rx-
6	Rct
7	LED1-
8	LED1+
9	LED2-
10	LED2+



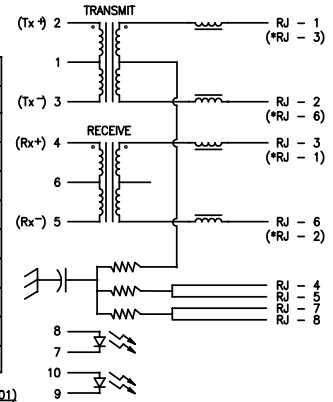
PINOUT

PIN	SYMBOL
1	Tct
2	Tx+
3	Tx-
4	Rx+
5	Rx-
6	Rct
7	LED1-
8	LED1+
9	LED2-
10	LED2+



PINOUT

PIN	SYMBOL
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2	Tx+
3	Tx-
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5	Rx-
6	Rct
7	LED1-
8	LED1+
9	LED2-
10	LED2+



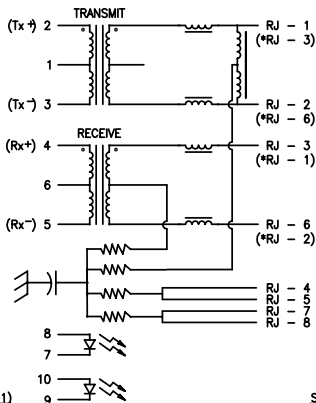
SCHEMATIC (RJMG-73XX-3X-01)

SCHEMATIC (RJMG-73XX-4X-01, RJMG-73XX-5X-01)

SCHEMATIC (RJMG-73XX-6X-01)

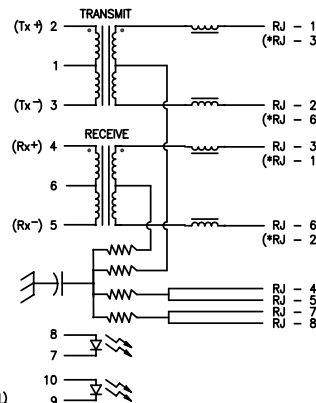
PINOUT

PIN	SYMBOL
1	Tct
2	Tx+
3	Tx-
4	Rx+
5	Rx-
6	Rct
7	LED1-
8	LED1+
9	LED2-
10	LED2+



PINOUT

PIN	SYMBOL
1	Tct
2	Tx+
3	Tx-
4	Rx+
5	Rx-
6	Rct
7	LED1-
8	LED1+
9	LED2-
10	LED2+



SCHEMATIC (RJMG-7XXX-7X-01)

SCHEMATIC (RJMG-7XXX-8X-01)

DO NOT SCALE DRAWING

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PINOUT STACKED USB (SERIES A)

PIN	SYMBOL	
1	VCC	(CABLE POWER)
2	-DATA	
3	+DATA	
4	GROUND	(CABLE GROUND)
5	VCC	(CABLE POWER)
6	-DATA	
7	+DATA	
8	GROUND	(CABLE GROUND)

NOTE

- DESIGNATORS 1 TO 10 ARE PRINTED WIRE BOARD CONNECTIONS.
- DIFFERENT CAPACITOR VALUES ARE AVAILABLE UPON REQUEST.
- NUMBERS WITH MARK "*" SHOW THE CONNECTION FOR RJMG-7XXX-XX-A1.

DESIGNED BY	APPROVED BY	DATE	COMPANY
L.K.	L.K.	JULY 23, 2009	Amphenol Canada Corp.
XXX	L.K.	JULY 23, 2009	
SEE NOTE 1			
REV. 03554	D.M.	JULY 23, 2009	4 - 1

STACKED RJMAG USB COMBO

P-RJMG-73XX-XX-01 1D
RJMG-USB 2 OF 3

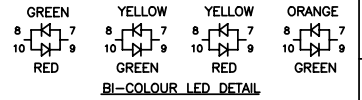
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INSETION LOSS	0.8dB TYP.	1.0dB MAX.	1-100MHz
RETURN LOSS	-22dB TYP.	-18dB MIN.	1-30MHz
	-18dB TYP.	-16dB MIN.	30-60MHz
	-12dB TYP.	-10dB MIN.	60-100MHz
OCL	400uH TYP.	350uH MIN.	100KHz .8mA DC BIAS
DC RESISTANCE	0.5ohm TYP.	1.0ohm MIN.	DC
CM TO CM REJECTION	40dB TYP.	38dB MIN.	0-100MHz
CM TO DM REJECTION	40dB TYP.	35dB MIN.	0-100MHz
HIPOT (ISOLATION)	2.25KV	2.25KV	DC
CROSSTALK (PAIR TO PAIR)	-38dB TYP.	-35dB MIN.	0-100MHz
(LED TO Tx/Rx)	-60dB TYP.	-50dB MIN.	0-100MHz
COMMON MODE IMPEDANCE	3.5Kohm TYP.	3Kohm MIN.	0-10MHz
	575ohm TYP.	550ohm MIN.	10-100MHz

ELECTRICAL SPECIFICATION (@25°C), TURN RATIO: 1:√2 AND 1:2

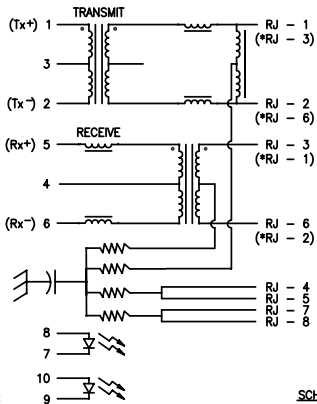
INSETION LOSS	0.8dB TYP.	1.0dB MAX.	1-10MHz
RETURN LOSS	-20dB TYP.	-16dB MIN.	1-10MHz
OCL RECEIVE	400uH TYP.	350uH MIN.	100KHz .8mA DC BIAS
OCL TRANSMIT	35uH TYP.	28uH MIN.	100KHz .8mA DC BIAS
DC RESISTANCE	0.5ohm TYP.	1.0ohm MIN.	DC
CM TO CM REJECTION	40dB TYP.	38dB MIN.	0-100MHz
CM TO DM REJECTION	40dB TYP.	35dB MIN.	0-100MHz
HIPOT (ISOLATION)	2.25KV	2.25KV	DC
CROSSTALK (PAIR TO PAIR)	-38dB TYP.	-35dB MIN.	0-100MHz
(LED TO Tx/Rx)	-60dB TYP.	-50dB MIN.	0-100MHz
COMMON MODE IMPEDANCE	3.5Kohm TYP.	3Kohm MIN.	0-10MHz
	575ohm TYP.	550ohm MIN.	10-100MHz

REVISIONS			
REV.	DATE	DESCRIPTION	BY
1B		PRELIMINARY	
1C		DATE CHANGE	
1D		ADD FINAL CALL-OUT	



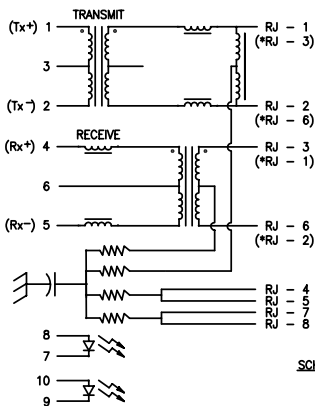
PINOUT

PIN	SYMBOL
1	Tx+
2	Tx-
3	Tct
4	Rct
5	Rx+
6	Rx-
7	LED1-
8	LED1+
9	LED2-
10	LED2+



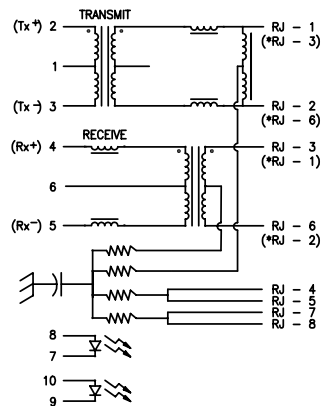
PINOUT

PIN	SYMBOL
1	Tx+
2	Tx-
3	Tct
4	Rx+
5	Rx-
6	Rct
7	LED1-
8	LED1+
9	LED2-
10	LED2+



PINOUT

PIN	SYMBOL
1	Tct
2	Tx+
3	Tx-
4	Rx+
5	Rx-
6	Rct
7	LED1-
8	LED1+
9	LED2-
10	LED2+



SCHEMATIC (RUMG-7XXX-9X-01)

SCHEMATIC (RUMG-7XXX-AX-01)

SCHEMATIC (RUMG-7XXX-BX-01)

PINOUT STACKED USB (SERIES A)

PIN	SYMBOL	(CABLE POWER)
1	VCC	
2	-DATA	
3	+DATA	
4	GROUND	(CABLE GROUND)
5	VCC	(CABLE POWER)
6	-DATA	
7	+DATA	
8	GROUND	(CABLE GROUND)

NOTE

- DESIGNATORS 1 TO 10 ARE PRINTED WIRE BOARD CONNECTIONS.
- DIFFERENT CAPACITOR VALUES ARE AVAILABLE UPON REQUEST.
- NUMBERS WITH MARK "*" SHOW THE CONNECTION FOR RUMG-7XXX-XX-A1.

DESIGNED BY	APPROVED BY	DATE	Amphenol Canada Corp.
	L.K.	JULY 23, 2009	
STACKED RUMAG USB COMBO			
REV. 1	DATE	BY	DESCRIPTION
1	4-1		RUMAG-USB

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