

Harsh Environment Modular Jack

IP67



Amphenol's MRJ series represents a unique and innovative RJ connector design. This design provides the ideal solution for Network data transfer in harsh and demanding environmental conditions. In addition, these connectors can be supplied with EMI and transient voltage protection capabilities. These RJs are water resistant (IP67) in both mated and unmated conditions. They are truly unshaken by hostile environmental elements.

Features

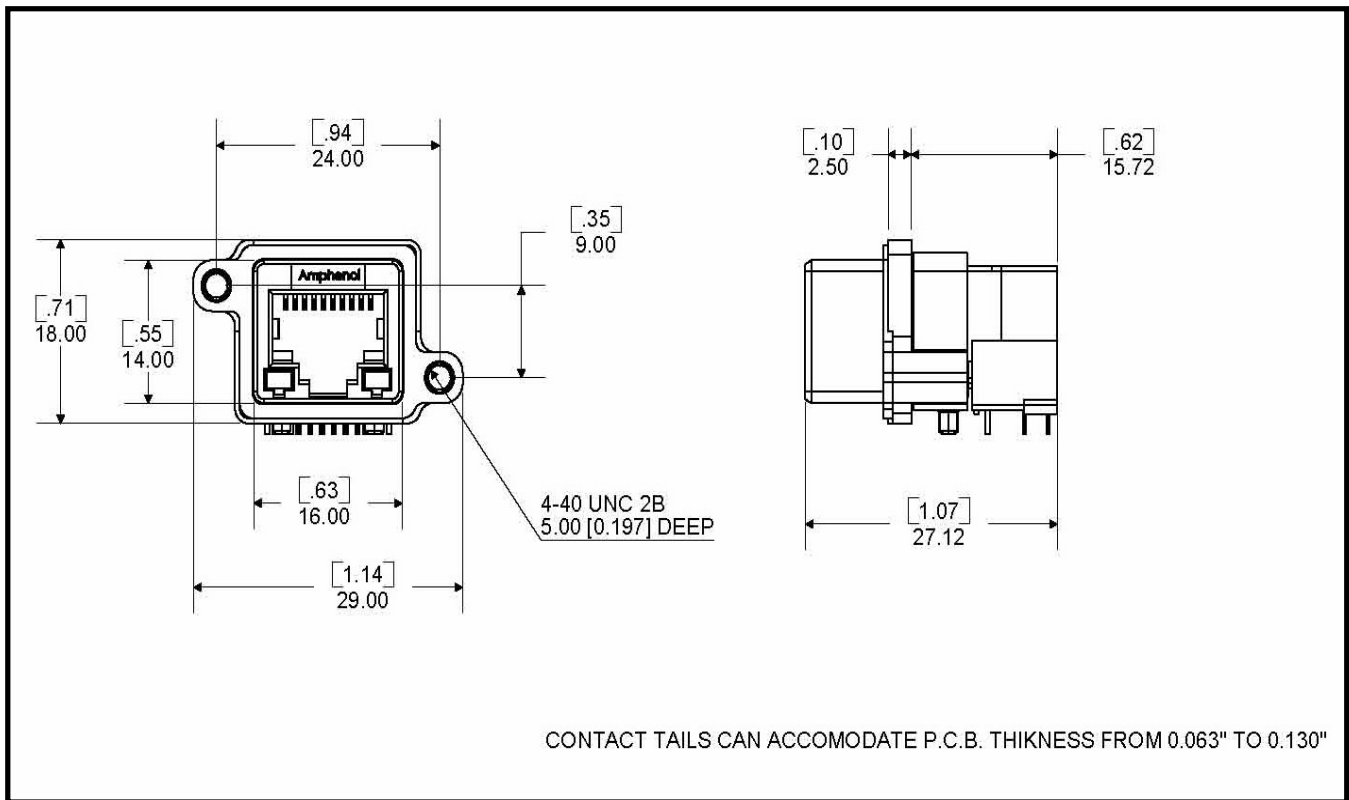
- Cat 5 Ethernet performance
- IP67 sealed in the mated and unmated conditions
- Meets military shock and vibration levels
- Available with optional integrated LEDs
- Available with various termination methods
- Available with EMI filtering and transient voltage protection
- All metal die cast outer shell construction
- Includes a feature that will not allow an RJ11 to enter.
- Will not allow an improperly terminated plug to enter.

Applications

- Industrial
- Military Communications
- Marine
- Mobile Communications
- Automotive

Technical Data

- Contact Resistance	30 milliohms maximum
- Insulation Resistance	50 megaohms minimum at 100 VDC
- Current Rating	1.5 Amps
- Voltage rating	100 VDC at -25° C to +85° C
- Dielectric Withstanding Voltage	500 VAC, RMS, 60 Hz 1 minute
- Storage Temperature	-40° C to +105° C
- Operating Temperature	-40° C to +105° C



Ordering Information

MRJ - X X X X - X X

Versions
 5 - Standard Receptacle
 6 - Same as 5 with EMI Filter
 7 - Same as 5 with Transient Voltage Protection

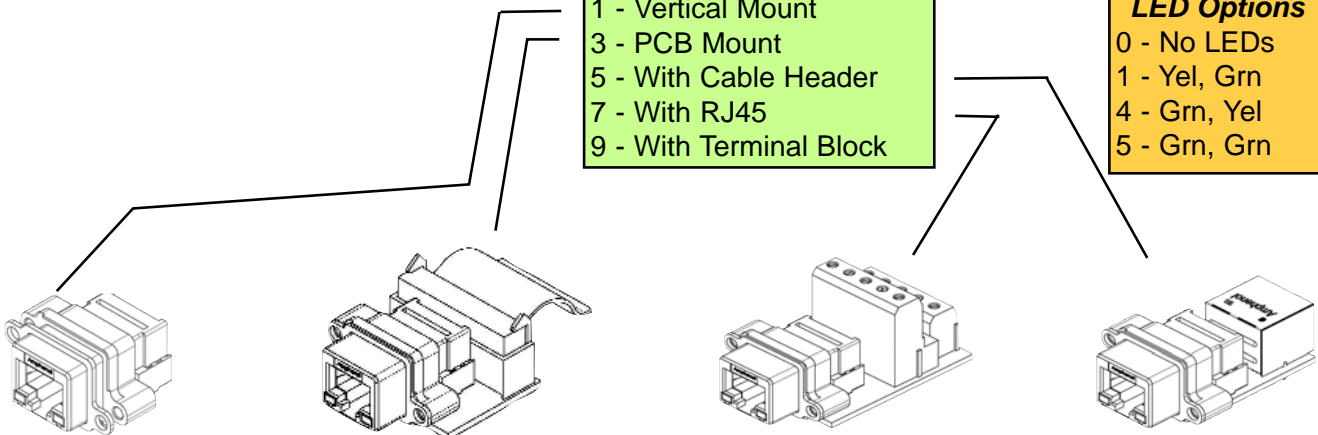
Number of Contacts
 8 - 8 Contacts
 A - 10 Contacts

Number of Ports
 1 to 4

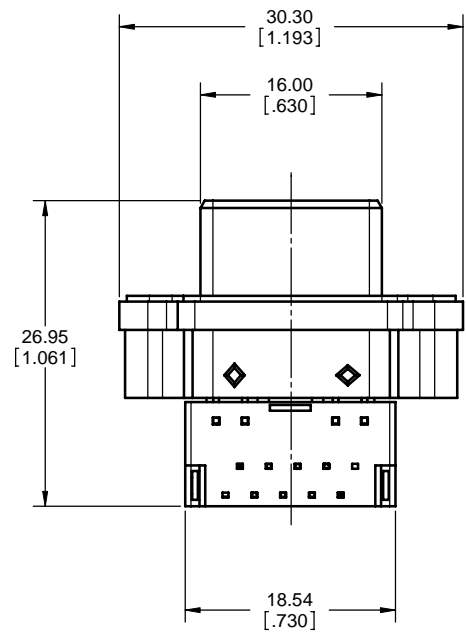
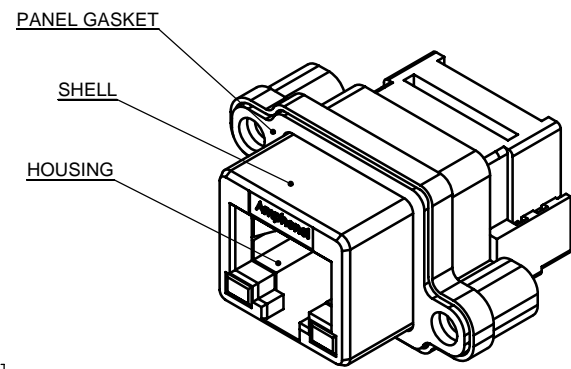
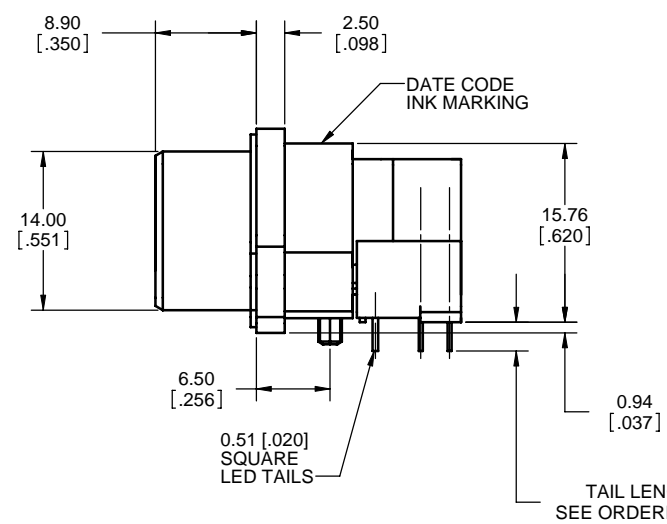
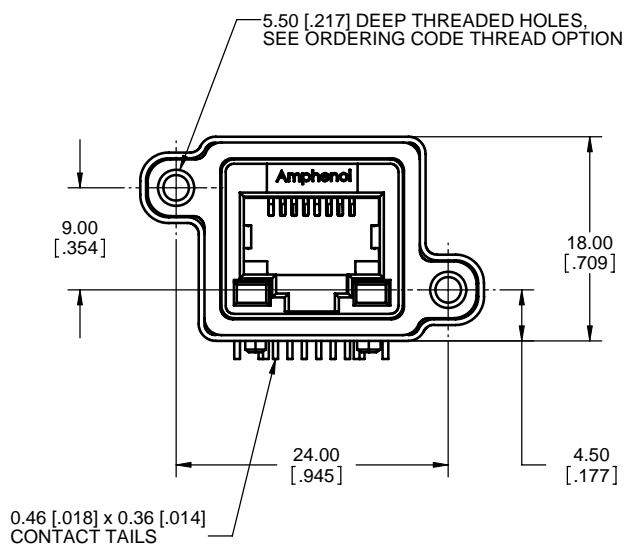
Contact Tail Length
 0 - 0.100"
 A - 0.130"
 B - 0.150"
 C - 0.170"

Mounting
 1 - Vertical Mount
 3 - PCB Mount
 5 - With Cable Header
 7 - With RJ45
 9 - With Terminal Block

LED Options
 0 - No LEDs
 1 - Yel, Grn
 4 - Grn, Yel
 5 - Grn, Grn



REVISIONS			
REV	ECN, ERN NO.	DATE	APPRD.
G	PRODUCT DRAWING	JAN18/08	K.L.



ORDERING CODE: **MRJ-53XX-X1**

SERIES, RUGGED RJ
 RECEPTACLE, RIGHT ANGLE, PCB TAIL
 NUMBER OF CONTACTS
 8= 8 CONTACTS
 A=10 CONTACTS
 LED OPTION
 0=NONE
 1=GREEN LEFT, YELLOW RIGHT
 4=YELLOW LEFT, GREEN RIGHT
 5=GREEN LEFT, GREEN RIGHT
 TAIL LENGTH AND MOUNTING HOLE THREAD OPTION
 0= TAIL LENGTH A=2.54 [.100], #4-40 UNC THREAD
 B= TAIL LENGTH A=3.81 [.150], #4-40 UNC THREAD
 M= TAIL LENGTH A=2.54 [.100], M3 x 0.5 THREAD
 P= TAIL LENGTH A=3.81 [.150], M3 x 0.5 THREAD
 SINGLE PORT

NOTES:

- MATERIAL:**
 ALL MATERIALS ARE RoHS COMPLIANT PER EU DIRECTIVE 2002/95/EC AND AMENDMENTS
 - SHELL - DIECAST ZINC, NICKEL PLATED
 - CONTACTS - PHOSPHOR BRONZE WITH 50 MICRINCHES (1.27 MICRONS) GOLD OVER 50 MICRINCHES (1.27 MICRONS) MINIMUM NICKEL ON THE MATING AREA AND MATTE TIN OVER NICKEL ON THE CONTACT TAILS.
 - INSERTS - ENGINEERING THERMOPLASTIC, UL FLAMMABILITY RATING 94V-0, REAR INSERTS: BLACK, FRONT INSERT: CLEAR
 - LED'S - EPOXY LENS, STEEL TAILS WITH TIN PLATING
 - GASKET - SILICONE RUBBER
- ENVIRONMENTAL PERFORMANCE PER IEC 60529 CODE IP67 FOR SEAL BETWEEN MATING AREA AND PCB SIDE OF CONNECTOR. GASKET PROVIDES FOR SEAL TO INSIDE FACE OF PANEL.**
- CURRENT RATING: 1.5 AMPERES**
- CONTACT RESISTANCE: 30 MILLIOHMS MAXIMUM**
- OPERATING TEMPERATURE: -40C TO +105C**
- CONNECTOR SEAL TO WITHSTAND 34.5 KPa (5 PSI) PRESSURE AFTER TEMPERATURE EXPOSURE OF 150°C FOR 180 SECONDS (CONNECTOR PRE-HEAT) AND 265 °C FOR 8 SECONDS (SOLDER DIP TAILS).**
- RECOMMENDED TORQUE FOR PANEL MOUNT SCREWS: 0.45 TO 0.65 Nm (4.00 - 5.75 IN-LBS) FOR STEEL SCREWS WITH 3.00 (.118) THREAD ENGAGEMENT.**



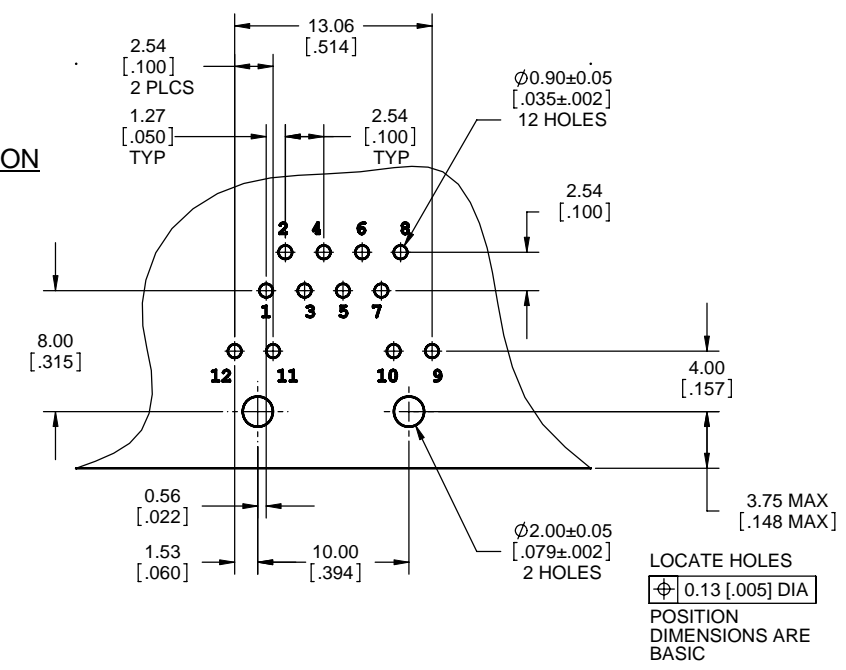
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UNLESS OTHERWISE SPECIFIED:		DATE	Amphenol Canada Corp.
DIMENSIONS ARE IN MILLIMETERS		NOV11/04	
TOLERANCES:		DRAWN S.SEMENOV	MRJ SERIES RUGGED MODULAR JACK, 8 & 10 POSITION RIGHT ANGLE, WITH LED, TAIL LENGTH & THREAD OPTIONS, RoHS COMPLIANT
FRACTIONAL ±		DESIGNED S.SEMENOV	
ANGULAR MATCH ± BEND ±		CHECKED	SIZE DWG. NO. REV C P-MRJ-53XX-X1 G
TWO PLACE DECIMAL ±		I.E. APPRD.	
THREE PLACE DECIMAL ±		D.A. APPRD.	SCALE: 3:1 WEIGHT: SHEET 1 OF 2
INTERPRET GEOMETRIC TOLERANCING PER:		DWG. APPRD. A.GREEN	
MATERIAL:		ENG. REL. NO.	
NEXT ASSY	USED ON	REF.	
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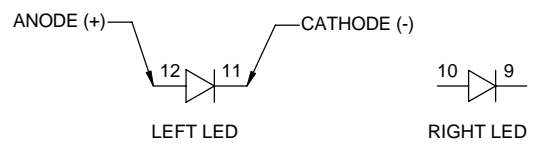
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RECOMMENDED P.C.B. LAYOUT

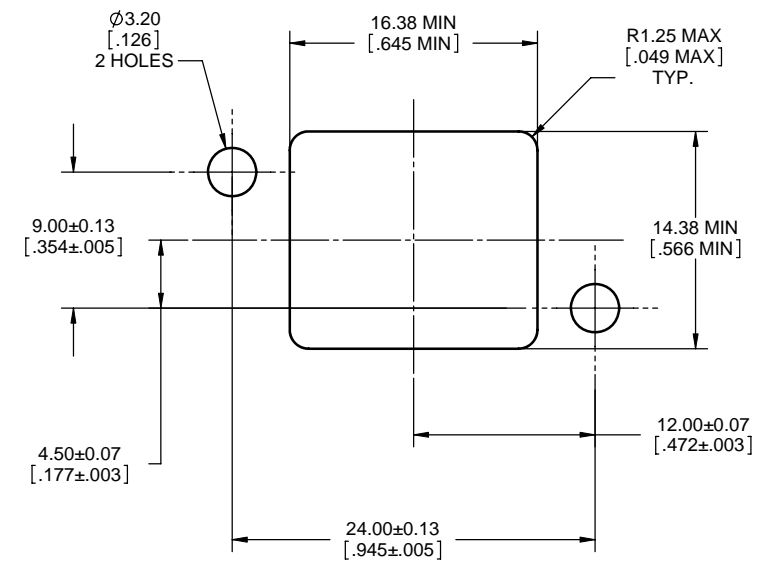
8 POSITION VIEW



LOCATE HOLES
 $\phi 0.13$ [0.005] DIA
 POSITION DIMENSIONS ARE BASIC

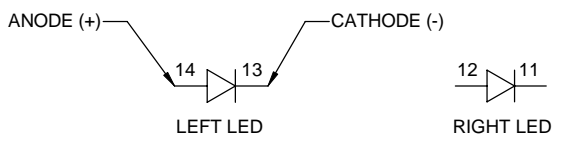
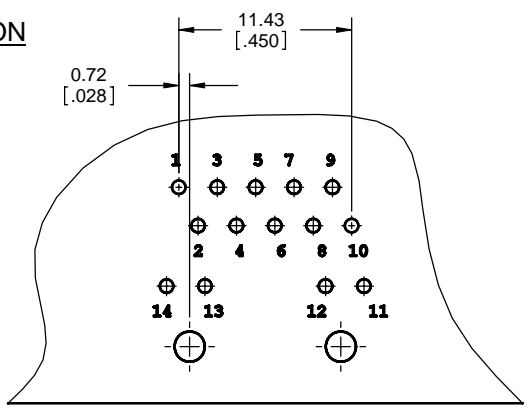


8 POSITION LED SCHEMATIC (GREEN OR YELLOW)



RECOMMENDED PANEL CUTOUT

10 POSITION VIEW



10 POSITION LED SCHEMATIC (GREEN OR YELLOW)



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THREE PLACE DECIMAL ±		I.E. APPRD.	
INTERPRET GEOMETRIC TOLERANCING PER MATERIAL		D.A. APPRD.	SCALE: 4:1 WEIGHT: SHEET 2 OF 2
FINISH		DWG. APPRD. A.GREEN	
NEXT ASSY	USED ON	ENG. REL. NO.	CODE ID. NO.
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