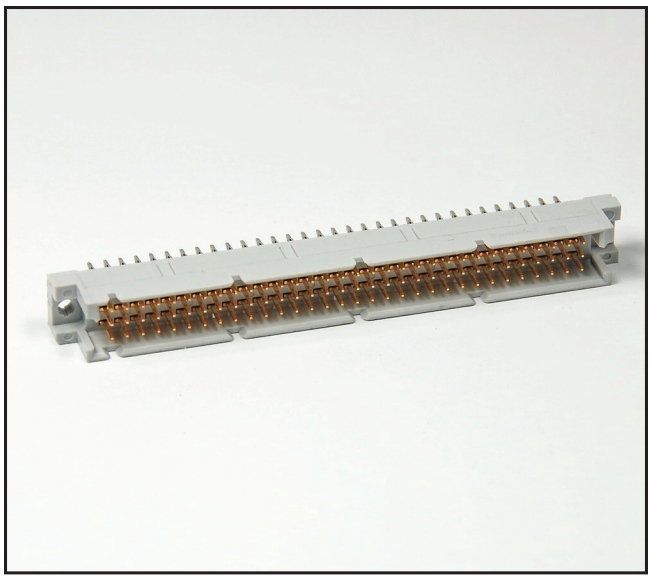
3M™ DIN R-Form Plug

Vertical, Solder Tail or Press-Fit Termination

DIN 41612 Series



- Early mate late break (EMLB) grounding contacts for hot swapping
- Select load capability
- Expanded pin counts
- Optional press-fit or solder tail termination
- Mates with C-form and R-form sockets
- Optional retention clip
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3M.com/Interconnects for compliance information (RIA E1 & C1 apply)

Date Modified: February 2, 2010

Physical

Insulation:	
Material:	Glass Filled Polyester (PBT)
Flammability:	UL 94V-0
Color:	Gray
Contact:	
Material:	Copper Alloy
Plating:	
Underplating:	50 µ" Min.Nickel
Wiping Area:	See Ordering Information
Termination:	See Ordering Information

Electrical

Current Rating:	3.0A at 30°C T-rise above Ambient
Contact Resistance:	≤20 mΩ
Insulation Resistance:	≥1,000 MΩ, 100V_{DC}
Withstanding Voltage:	1,000 V_{AC} for 1 minute

Environmental

Temperature Rating:	-55°C to 125°C
Process Temperature Rating:	Maximum Insulator Temperature 191°C (solder wave process only)

UL File No.: E68080

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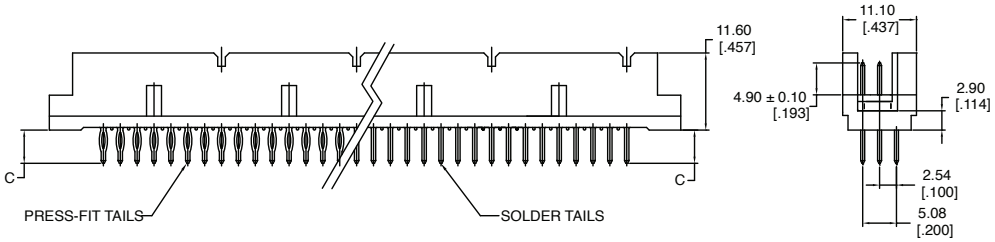
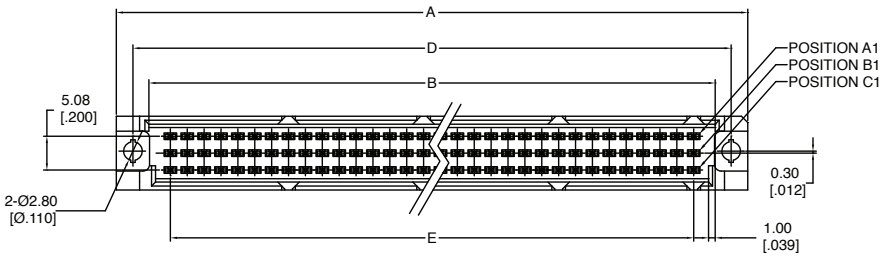
Table 1

Contact Quantity	Part Number	A	B	D	E
16	DIN-016RPA-XXX-XXXX	54.40 [2.142]	44.60 [1.756]	50.00 [1.969]	38.10 [1.500]
32	DIN-032RPB-XXX-XXXX	54.40 [2.142]	44.60 [1.756]	50.00 [1.969]	38.10 [1.500]
48	DIN-048RPC-XXX-XXXX	54.40 [2.142]	44.60 [1.756]	50.00 [1.969]	38.10 [1.500]
32	DIN-032RPD-XXX-XXXX	54.40 [2.142]	44.60 [1.756]	50.00 [1.969]	38.10 [1.500]
16	DIN-016RPE-XXX-XXXX	54.40 [2.142]	44.60 [1.756]	50.00 [1.969]	38.10 [1.500]
32	DIN-032RPA-XXX-XXXX	95.00 [3.740]	85.20 [3.354]	90.00 [3.543]	78.74 [3.100]
64	DIN-064RPB-XXX-XXXX	95.00 [3.740]	85.20 [3.354]	90.00 [3.543]	78.74 [3.100]
96	DIN-096RPC-XXX-XXXX	95.00 [3.740]	85.20 [3.354]	90.00 [3.543]	78.74 [3.100]
64	DIN-064RPD-XXX-XXXX	95.00 [3.740]	85.20 [3.354]	90.00 [3.543]	78.74 [3.100]
32	DIN-032RPE-XXX-XXXX	95.00 [3.740]	85.20 [3.354]	90.00 [3.543]	78.74 [3.100]
40	DIN-040RPA-XXX-XXXX	115.40 [4.543]	105.52 [4.154]	110.32 [4.343]	99.06 [3.900]
80	DIN-080RPB-XXX-XXXX	115.40 [4.543]	105.52 [4.154]	110.32 [4.343]	99.06 [3.900]
120	DIN-120RPC-XXX-XXXX	115.40 [4.543]	105.52 [4.154]	110.32 [4.343]	99.06 [3.900]
80	DIN-080RPD-XXX-XXXX	115.40 [4.543]	105.52 [4.154]	110.32 [4.343]	99.06 [3.900]
40	DIN-040RPE-XXX-XXXX	115.40 [4.543]	105.52 [4.154]	110.32 [4.343]	99.06 [3.900]

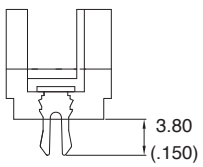




mm
[inch]

Tolerance Unless Noted			
	X.	.X	.XX
mm	± 0.50	± 0.25	± 0.15

[ ] Dimension for Reference Only



R1 with Retention Clip

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Electronic Solutions Division
Interconnect Solutions
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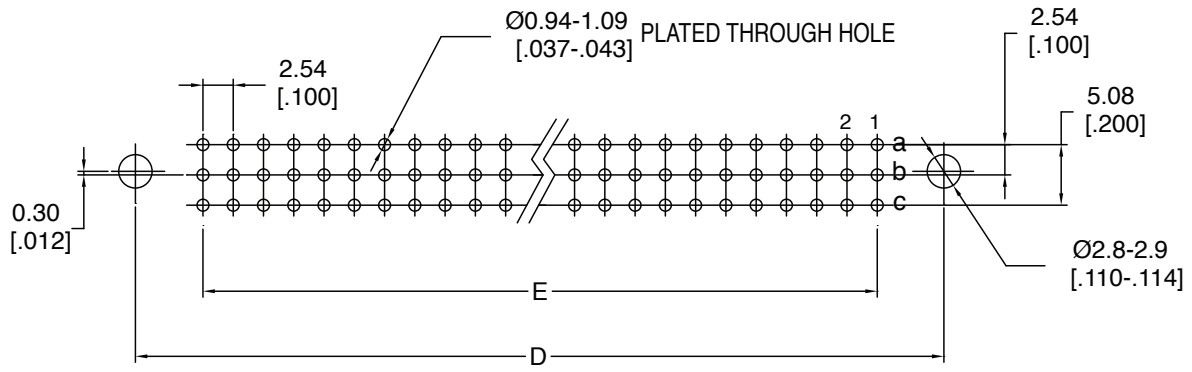

RECOMMENDED PCB LAYOUT

Ordering Information

DIN - XXXRP X - XXX - XX

Contact Quantity
SEE TABLE 1

A = A Row only (see note)
B = Rows A & C Filled
C = Rows A, B & C Filled
D = Rows A & B Filled
E = B Row only (see note)

Termination Options:
SEE TABLE 2

Plating Options:
SH = 1 - 3 µ" Gold on Contact
120 - 200 µ" Matte Tin on Terminal
FJ = 10 - 20 µ" Gold on Contact
120 - 200 µ" Matte Tin on Terminal
KR = 30 - 40 µ" Gold on Contact
120 - 200 µ" Matte Tin on Terminal
HM = 3 µ" Gold on Contact, 7 µ" Min. PdNi
120 - 200 µ" Matte Tin on Terminal
KV = 30 µ" Gold on contact area, 1 - 3 µ" Gold
on Board Termination

TABLE 2

SOLDER TERMINATION OPTION NO.	DIM "C" mm (in)	Comment
R1	3.75 (.148)	with retention
S1	3.75 (.148)	no retention
W	14.70 (.579)	no retention
PRESS-FIT TERMINATION OPTION NO.		
DPS	5.00 (.197)	
DPW1	13.25 (.522)	

Note: A and E options are currently not covered in UL File No. E68080.

• This diagram serves only for Part Number descriptive definitions.

PLEASE CONTACT YOUR LOCAL SALES REPRESENTATIVE FOR CUSTOMER SPECIFIC PRODUCT CONFIGURATIONS.

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3M Electronics Solutions Division
6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3Mconnector.com

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