3M™ Mini D Ribbon (MDR) Connectors

.050" Surface Mount Right Angle Die-Cast Receptacle – Shielded 102 Series

- Rugged die-cast body resists tipping during automated soldering operations
- Wiper-on-wiper contact for reliable repetitive plugging
- Ultra-low signal skew for high data rate transmission
- Interface latch design for connection stability
- Suitable for thumbscrew attach (see TS-0142 for available hardware)
- MDR digital LCD interface as a 20 or 26 contact connector
- Camera Link® interface as a 26 contact connector
- Contacts: 14, 20, 26, 40 and 50
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3mconnector.com for compliance information

Date Modified: October 27, 2010

Physical

Body Material:	Glass Reinforced Polyester (PCT), Natural Color
Flammability:	UL 94V-0
Alignment Plate Material:	LCP, Natural Color
Flammability:	UL 94V-0
Contact Material:	Copper Alloy
Underplating:	80 µ" [2 µm] Nickel
Wiping Area Plating:	See Ordering Information
Solder Tail Plating:	Flash Gold over Nickel (RIA E1 & C1 apply)
Shroud Material:	Steel
Plating:	Nickel
Lock Stand Material:	Zinc Alloy
Plating:	Nickel

Electrical

Current Rating:	1 A
Insulation Resistance:	>5 x 10^8 Ω at 500 V_{DC}
Withstanding Voltage:	500 V_{rms} for 1 minute

Environmental

Temperature Rating:	-55 °C to +85 °C
Process Rating:	240°C- 250°C peak temperature for less than 10 secs., 220°C soldering for 30 – 60 secs. after 150°C - 180°C preheat for 90 –120 secs. (reflow two times)

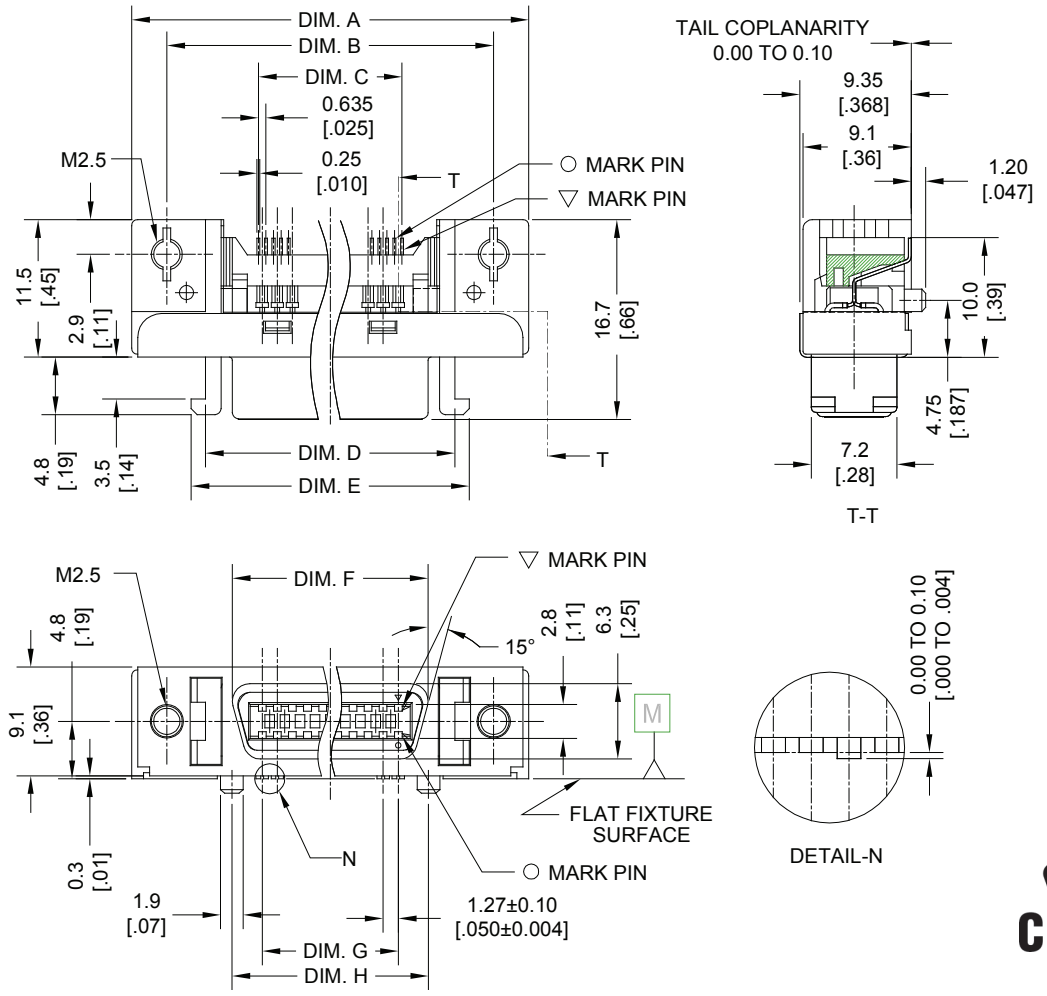
UL File No.: E68080

Camera Link® is a trademark of Automated Imaging Association

3M is a trademark of the 3M Company

3M™ Mini D Ribbon (MDR) Connectors

.050” Surface Mount Right Angle Die-Cast Receptacle — Shielded 102 Series



Contact Quantity	DIM A	DIM B	DIM C	DIM D	DIM E	DIM F	DIM G	DIM H
14	29.5 (1.16)	23.64 (.931)	8.255 (.325)	17.1 (.67)	19.5 (.77)	12.6 (.50)	7.62 (.300)	12.70 (.500)
20	33.3 (1.31)	27.45 (1.081)	12.065 (.475)	21.0 (.83)	23.4 (.92)	16.4 (.65)	11.43 (.450)	16.51 (.650)
26	37.2 (1.46)	31.26 (1.231)	15.875 (.625)	24.8 (.98)	27.2 (1.07)	20.2 (.80)	15.24 (.600)	20.32 (.800)
40	46.1 (1.81)	40.15 (1.581)	24.765 (.975)	33.7 (1.33)	36.1 (1.42)	29.1 (1.15)	24.13 (.950)	29.21 (1.150)
50	52.4 (2.06)	46.50 (1.831)	31.115 (1.225)	40.0 (1.57)	42.4 (1.67)	35.5 (1.40)	30.48 (1.200)	35.56 (1.400)

mm
(inch)

Tolerance Unless Noted			
	.0	.00	.000
mm	±.3	±.15	±.150

( ) Dimensions used for Reference Only

Ordering Information

102XX-1S10 PX

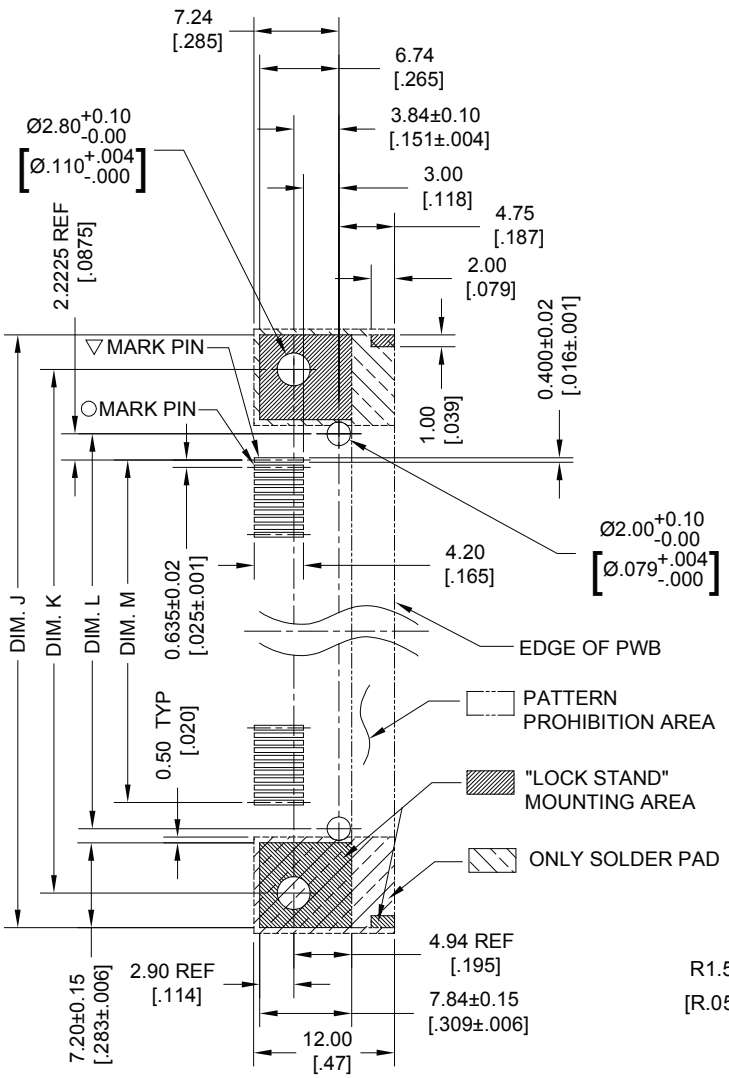
Contact Quantity
See Table

Wiping Area Plating:
L = 8 µ” min. Gold with Lubricant Treatment
E = 20 µ” min. Gold

3M is a trademark of the 3M Company
For technical, sales or ordering information call
800-225-5373

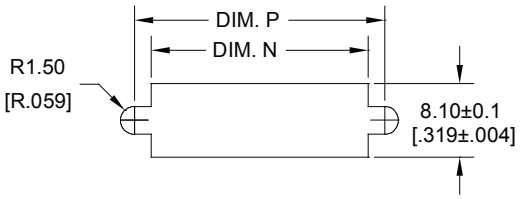
3M™ Mini D Ribbon (MDR) Connectors

.050" Surface Mount Right Angle Die-Cast Receptacle — Shielded 102 Series



Recommended Board Layout

Viewed from Connector Side



Recommended Panel Cutout

Panel Thickness: 2.0 mm (.08 inch) Max.

Contact Quantity	DIM J	DIM K	DIM L	DIM M	DIM N	DIM P
14	29.5 (1.16)	23.64 (.931)	12.70 (.500)	8.255 (.325)	19.9 (.78)	23.64 .13 (.931)
20	33.3 (1.31)	27.45 (1.081)	16.51 (.650)	12.065 (.475)	23.8 (.94)	27.45 .13 (1.081)
26	37.2 (1.46)	31.26 (1.231)	20.32 (.800)	15.875 (.625)	27.6 (1.09)	31.26 .13 (1.231)
40	46.1 (1.81)	40.15 (1.581)	29.21 (1.150)	24.765 (.975)	36.5 (1.44)	40.15 .13 (1.581)
50	52.4 (2.06)	46.50 (1.831)	35.56 (1.400)	31.115 (1.225)	42.8 (1.69)	46.50 .13 (1.831)

mm
(inch)

Tolerance Unless Noted			
	.0	.00	.000
mm	±.3	±.05	±.050

( ) Dimensions used for Reference Only

Note: The connector should be mounted to the panel and printed circuit board with screws. See TS-0142 for mounting hardware.

TS-2242-B
Sheet 3 of 3

3M is a trademark of the 3M Company

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

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

Please recycle. Printed in USA.
© 3M 2010. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.