

DESCRIPTION/APPLICATION

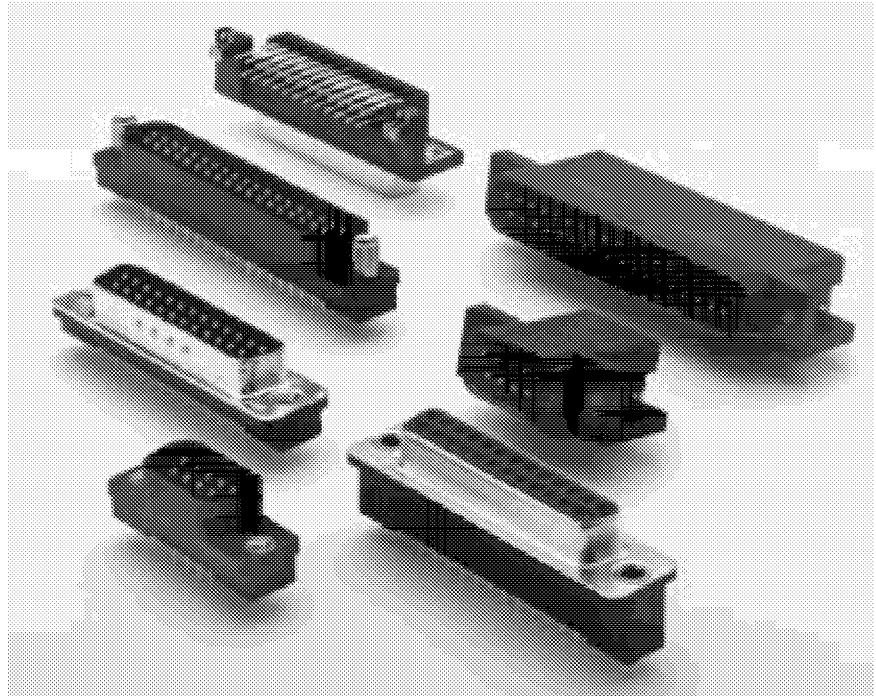
HOLMBERG® D-Subminiature connectors are all plastic or metal-shielded for printed circuit board applications in the telecommunication, data processing, instrumentation, industrial control and other industries where low cost and high performance are required. They are fully intermatable with all D-Subminiature connectors – including crimp, solder and ANSLEY® insulation displacement types.

Available in 9, 15, 25 and 37 positions, the unique design of the HOLMBERG® D-Subminiature connectors ensures excellent contact retention and precisely located, rigid contact tails for easy assembly.

DESIGN ADVANTAGES

- Large lead-In provides easy mating.
- Smooth lead on top of pins allows easy mating and low insertion force with mating receptacle.
- Rigid tails need no support. Right angle tails have channel cross-section for exceptional strength and rigidity.
- 60/40 Tin/lead selective plating on the tail enhances solderability.
- Metal shell provides electrical ground path continuity and EM/RFI shielding, from the mating receptacle metal shell through the grounding bumps on the male shell.

HOLMBERG® D-SUBMINIATURE CONNECTORS



ALL PLASTIC RIGHT ANGLE MALE PINS FOR PCB MOUNTING



PHYSICAL PROPERTIES

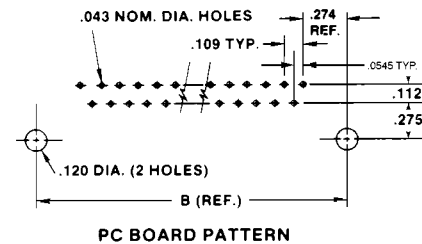
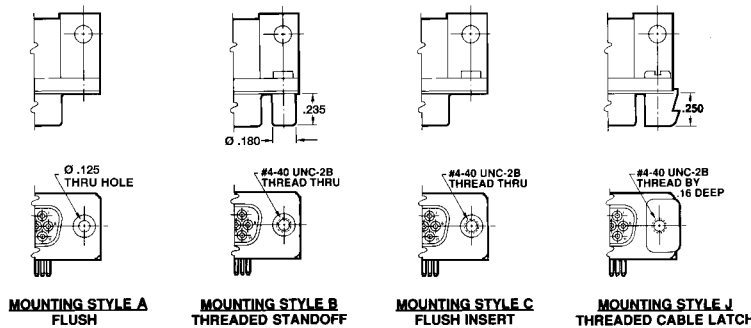
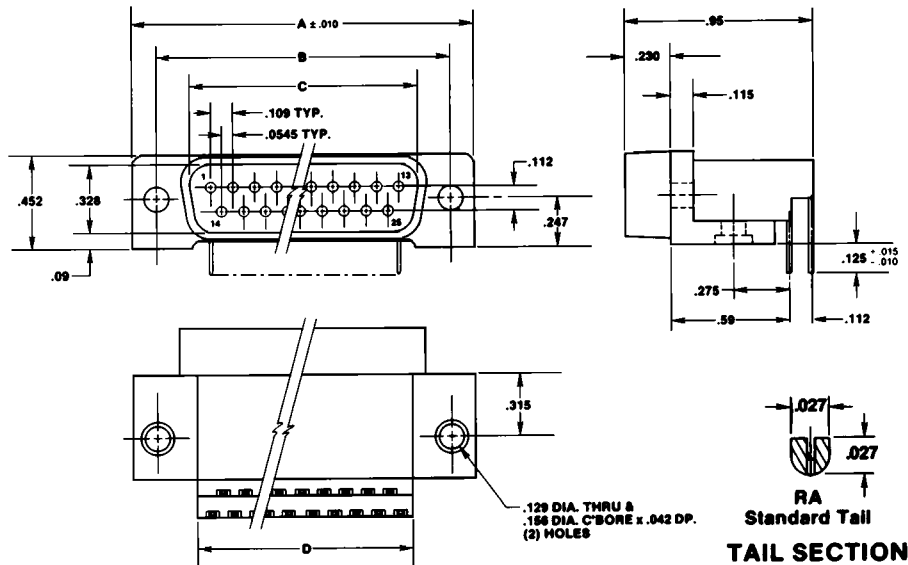
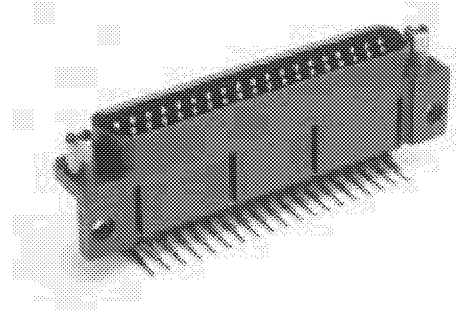
INSULATION MATERIAL: Glass filled thermoplastic
rated UL 94V-0
COLOR: Black
CONTACTS: High strength copper alloy
DURABILITY: Up to 500 insertions and withdrawals
without degradation of performance, dependent
upon contact plating thickness selected

ELECTRICAL PROPERTIES

OPERATING VOLTAGE: 600 VDC (sea level)
CURRENT RATING: 5 Amperes
CONTACT RESISTANCE: 10 milliohms max.
@ rated current
INSULATION RESISTANCE: 5000 megohms minimum
DIELECTRIC WITHSTANDING VOLTAGE:
1000 VAC minimum

ENVIRONMENTAL PROPERTIES

TEMPERATURE RATING: -55°C TO 125°C



Ordering Information

NUMBER OF CONTACTS	BASIC CONNECTOR W/THRU HOLES	CATALOG NUMBER BY MOUNTING STYLE				DIMENSIONS			
		ROUND STANDOFF 4-40 THREAD	FLUSH INSERT 4-40 THREAD	LATCH W/STANDOFF & 4-40 THREADED INSERT	A	B	C	D	
9	H2M09RA29A	H2M09RA29B	H2M09RA29C	H2M09RA29J	1.224	.984	.666	.624	
15	H2M15RA29A	H2M15RA29B	H2M15RA29C	H2M15RA29J	1.552	1.312	.994	.952	
25	H2M25RA29A	H2M25RA29B	H2M25RA29C	H2M25RA29J	2.092	1.852	1.534	1.492	
37	H2M37RA29A	H2M37RA29B	H2M37RA29C	H2M37RA29J	2.740	2.500	2.183	2.140	

Add suffix S for metal snap latches and P for plastic. See page 386 for descriptions. Not available on basic connector.

ALL PLASTIC RIGHT ANGLE FEMALE RECEPTACLES FOR PCB MOUNTING



PHYSICAL PROPERTIES

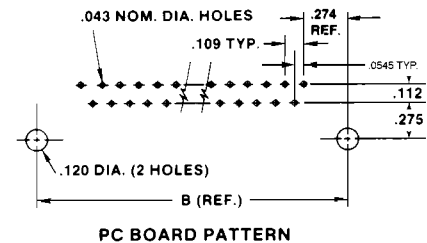
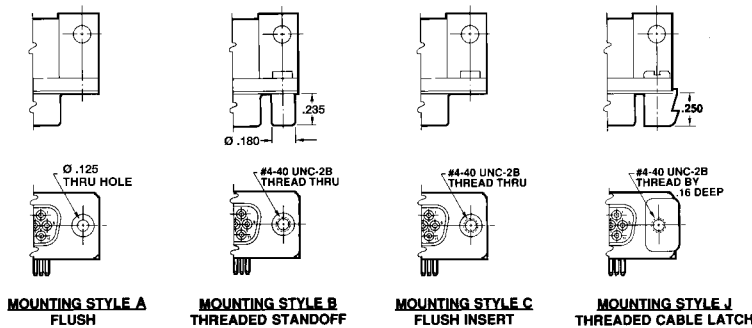
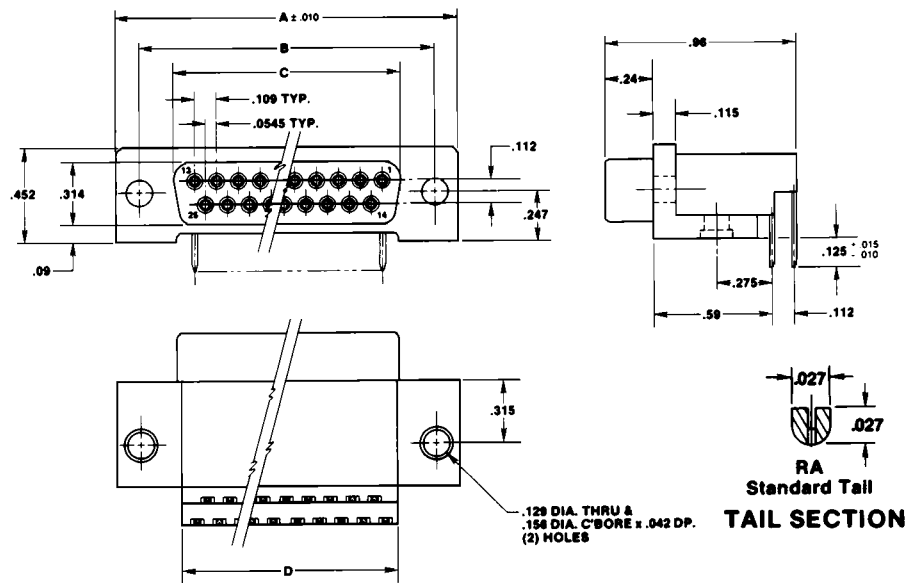
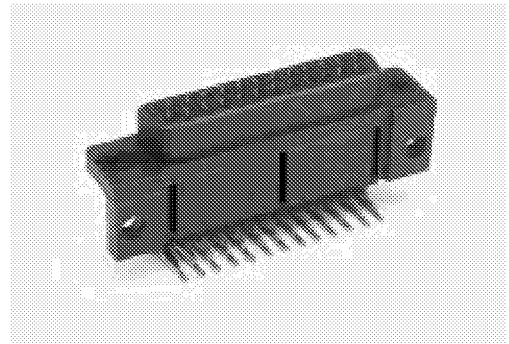
INSULATION MATERIAL: Glass filled thermoplastic
rated UL 94V-0
COLOR: Black
CONTACTS: High strength copper alloy
DURABILITY: Up to 500 insertions and withdrawals
without degradation of performance, dependent
upon contact plating thickness selected

ELECTRICAL PROPERTIES

OPERATING VOLTAGE: 600 VDC (sea level)
CURRENT RATING: 5 Amperes
CONTACT RESISTANCE: 10 milliohms max.
@ rated current
INSULATION RESISTANCE: 5000 megohms minimum
DIELECTRIC WITHSTANDING VOLTAGE:
1000 VAC minimum

ENVIRONMENTAL PROPERTIES

TEMPERATURE RATING: -55°C TO 125°C



Ordering Information

NUMBER OF CONTACTS	BASIC CONNECTOR W/THRU HOLES	CATALOG NUMBER BY MOUNTING STYLE			DIMENSIONS			
		ROUND STANDOFF 4-40 THREAD	FLUSH INSERT 4-40 THREAD	LATCH W/STANDOFF & 4-40 THREADED INSERT	A	B	C	D
9	H2R09RA29A	H2R09RA29B	H2R09RA29C	H2R09RA29J	1.224	.984	.646	.624
15	H2R15RA29A	H2R15RA29B	H2R15RA29C	H2R15RA29J	1.552	1.312	.974	.952
25	H2R25RA29A	H2R25RA29B	H2R25RA29C	H2R25RA29J	2.092	1.852	1.514	1.492
37	H2R37RA29A	H2R37RA29B	H2R37RA29C	H2R37RA29J	2.740	2.500	2.162	2.140

Add suffix S for metal snap latches and P for plastic. See page 386 for descriptions. Not available on basic connector.

METAL SHELL RIGHT ANGLE MALE PINS FOR PCB MOUNTING



PHYSICAL PROPERTIES

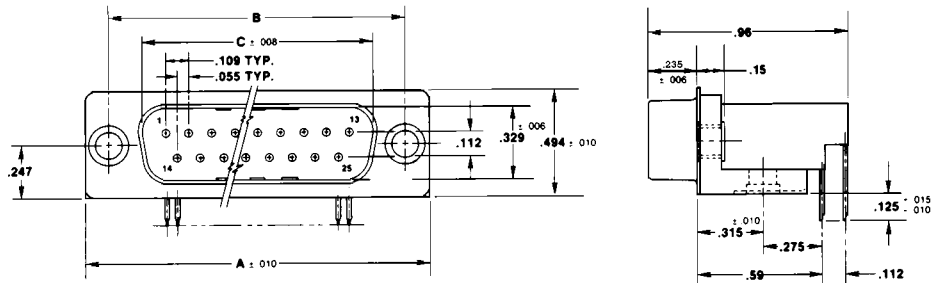
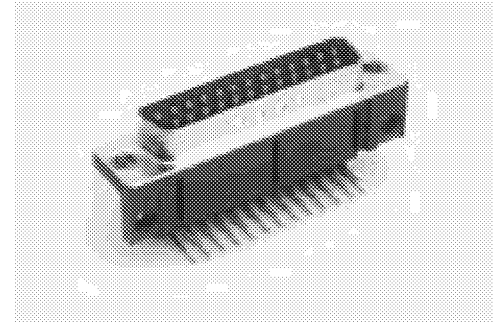
INSULATION MATERIAL: Glass filled thermoplastic rated UL 94V-0
 COLOR: Black
 CONTACTS: High strength copper alloy
 METAL SHELL: Steel, bright tin plate
 DURABILITY: Up to 500 insertions and withdrawals without degradation of performance, dependent upon contact plating thickness selected

ELECTRICAL PROPERTIES

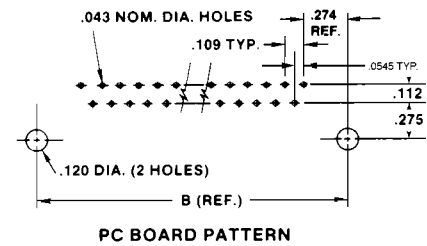
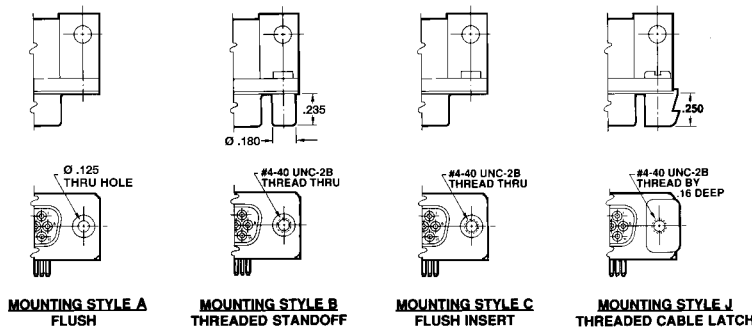
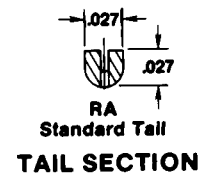
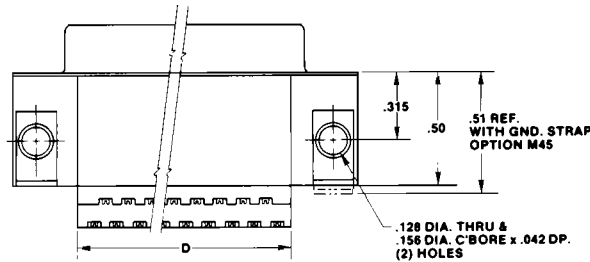
OPERATING VOLTAGE: 600 VDC (sea level)
 CURRENT RATING: 5 Amperes
 CONTACT RESISTANCE: 10 milliohms max. @ rated current
 INSULATION RESISTANCE: 5000 megohms minimum
 DIELECTRIC WITHSTANDING VOLTAGE: 1000 VAC minimum

ENVIRONMENTAL PROPERTIES

TEMPERATURE RATING: -55°C TO 125°C



For grounding straps, see page 299



Ordering Information

NUMBER OF CONTACTS	BASIC CONNECTOR W/THRU HOLES	CATALOG NUMBER BY MOUNTING STYLE				DIMENSIONS			
		ROUND STANDOFF 4-40 THREAD	FLUSH INSERT 4-40 THREAD	LATCH W/STANDOFF & 4-40 THREADED INSERT	A	B	C	D	
9	H4M09RA29A	H4M09RA29B	H4M09RA29C	H4M09RA29J	1.224	0.984	0.666	0.624	
15	H4M15RA29A	H4M15RA29B	H4M15RA29C	H4M15RA29J	1.552	1.312	0.994	0.952	
25	H4M25RA29A	H4M25RA29B	H4M25RA29C	H4M25RA29J	2.092	1.852	1.534	1.492	
37	H4M37RA29A	H4M37RA29B	H4M37RA29C	H4M37RA29J	2.740	2.500	2.183	2.140	

Add suffix S for metal snap latches and P for plastic. See page 316 for descriptions. Not available on basic connector.

METAL SHELL RIGHT ANGLE FEMALE RECEPTACLES FOR PCB MOUNTING



PHYSICAL PROPERTIES

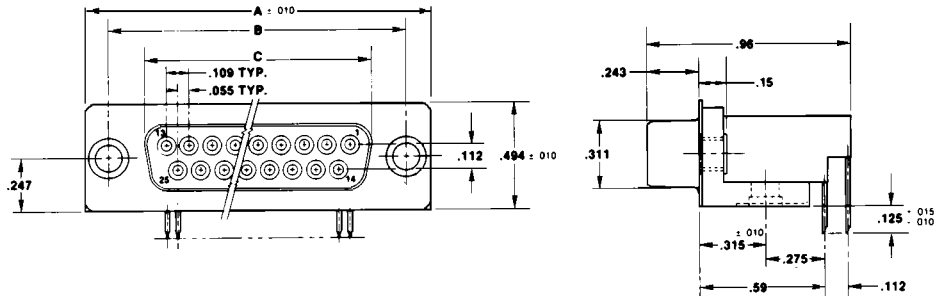
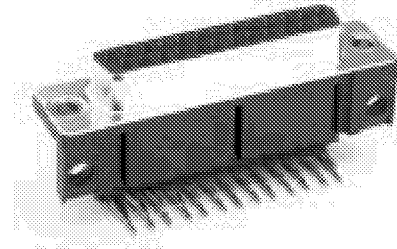
INSULATION MATERIAL: Glass filled thermoplastic
rated UL 94V-0
COLOR: Black
CONTACTS: High strength copper alloy
METAL SHELL: Steel, bright tin plate
DURABILITY: Up to 500 insertions and withdrawals
without degradation of performance, dependent
upon contact plating thickness selected

ELECTRICAL PROPERTIES

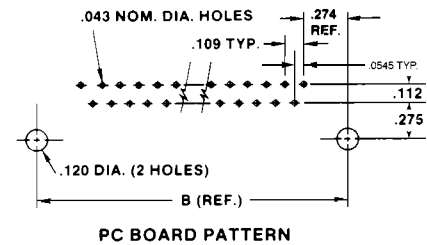
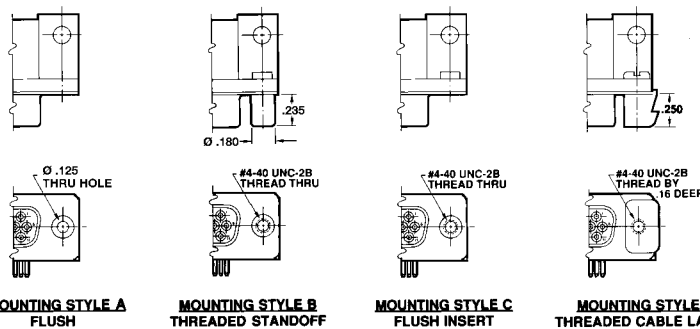
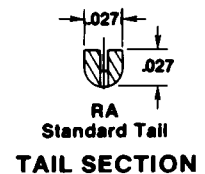
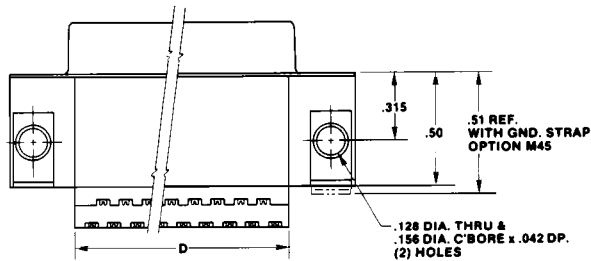
OPERATING VOLTAGE: 600 VDC (sea level)
CURRENT RATING: 5 Amperes
CONTACT RESISTANCE: 10 milliohms max.
@ rated current
INSULATION RESISTANCE: 5000 megohms minimum
DIELECTRIC WITHSTANDING VOLTAGE:
1000 VAC minimum

ENVIRONMENTAL PROPERTIES

TEMPERATURE RATING: -55°C TO 125°C



For grounding straps, see page 365



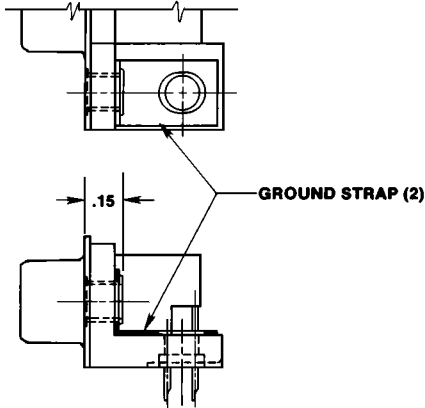
Ordering Information

NUMBER OF CONTACTS	BASIC CONNECTOR W/THRU HOLES	CATALOG NUMBER BY MOUNTING STYLE				DIMENSIONS			
		ROUND STANDOFF 4-40 THREAD	FLUSH INSERT 4-40 THREAD	LATCH W/STANDOFF & 4-40 THREADED INSERT	A	B	C	D	
9	H4R09RA29A	H4R09RA29B	H4R09RA29C	H4R09RA29J	1.224	.984	.646	.624	
15	H4R15RA29A	H4R15RA29B	H4R15RA29C	H4R15RA29J	1.552	1.312	.974	.952	
25	H4R25RA29A	H4R25RA29B	H4R25RA29C	H4R25RA29J	2.092	1.852	1.514	1.492	
37	H4R37RA29A	H4R37RA29B	H4R37RA29C	H4R37RA29J	2.740	2.500	2.162	2.140	

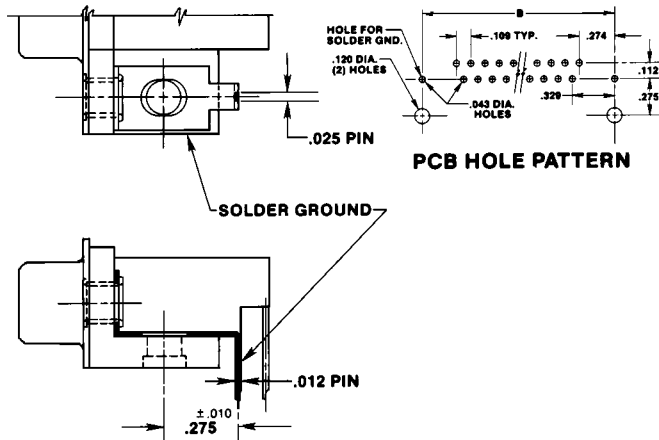
Add suffix S for metal snap latches and P for plastic. See page 386 for descriptions. Not available on basic connector.

RIGHT ANGLE GROUNDING STRAP MODIFICATIONS/OPTIONS

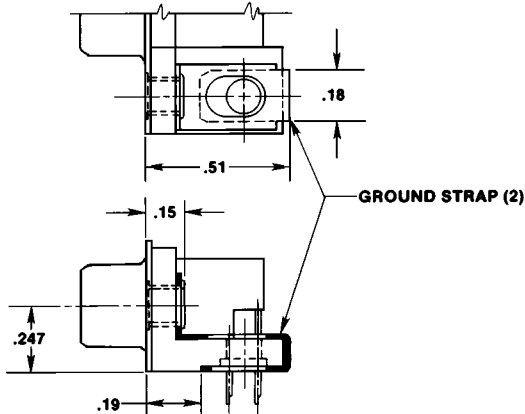
- M30 — Metric thread size M3
- M33 — Metric thread with inside ground strap
- M34 — Metric thread with solder ground
- M35 — Metric thread with outside/ inside ground strap
- M43 — Inside ground strap



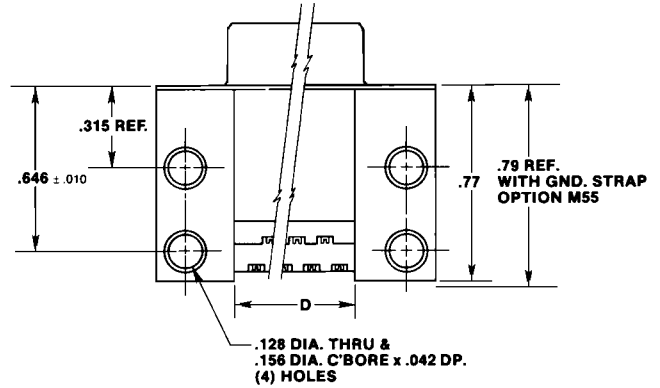
M44 — Solder ground



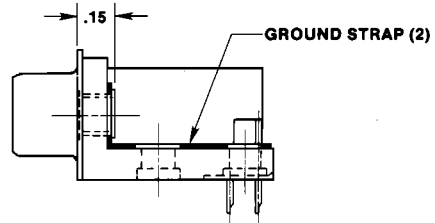
M45 — Outside/inside ground strap



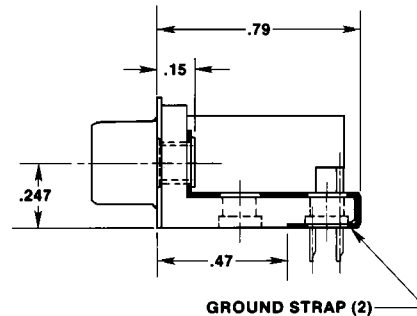
M50 — Back mounting hole



M53 — Back mounting hole with inside ground strap

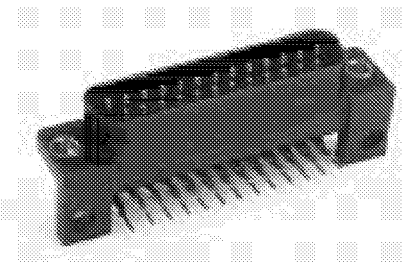


M55 — Back mounting hole with outside/inside ground strap



- M60 — Back mounting hole, metric thread
- M63 — Back mounting hole, metric thread with inside ground strap
- M65 — Back mounting hole, metric thread with outside/inside ground strap

ALL PLASTIC RIGHT ANGLE MALE PINS FOR PCB MOUNTING



PHYSICAL PROPERTIES

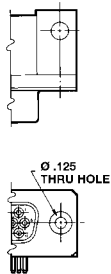
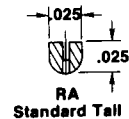
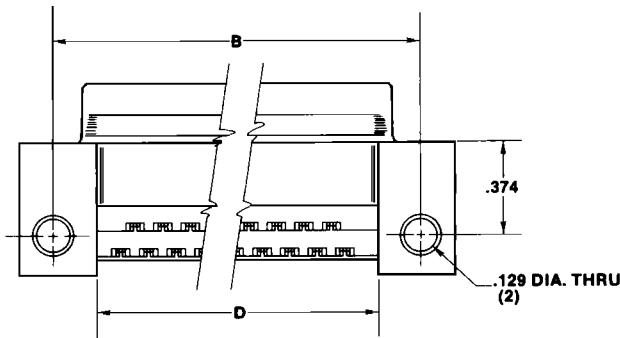
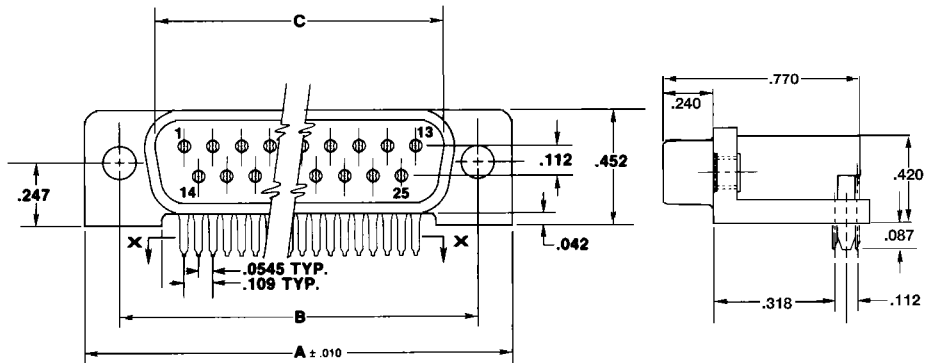
INSULATION MATERIAL: Glass filled thermoplastic rated UL 94V-0
 COLOR: Black
 CONTACTS: High strength copper alloy
 DURABILITY: Up to 500 insertions and withdrawals without degradation of performance, dependent upon contact plating thickness selected

ELECTRICAL PROPERTIES

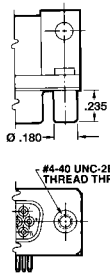
OPERATING VOLTAGE: 600 VDC (sea level)
 CURRENT RATING: 5 Amperes
 CONTACT RESISTANCE: 10 milliohms max. @ rated current
 INSULATION RESISTANCE: 5000 megohms minimum
 DIELECTRIC WITHSTANDING VOLTAGE: 1000 VAC minimum

ENVIRONMENTAL PROPERTIES

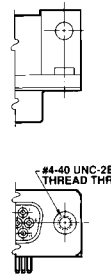
TEMPERATURE RATING: -55°C TO 125°C



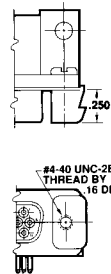
MOUNTING STYLE A
FLUSH



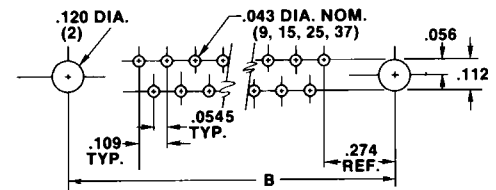
MOUNTING STYLE B
THREADED STANDOFF



MOUNTING STYLE C
FLUSH INSERT



MOUNTING STYLE J
THREADED CABLE LATCH



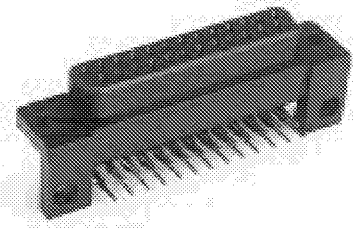
PC BOARD HOLE PATTERN

Ordering Information

NUMBER OF CONTACTS	BASIC CONNECTOR W/THRU HOLES	CATALOG NUMBER BY MOUNTING STYLE				DIMENSIONS			
		ROUND STANDOFF 4-40 THREAD	FLUSH INSERT 4-40 THREAD	LATCH W/STANDOFF & 4-40 THREADED INSERT	A	B	C	D	
9	H3M09RA29A	H3M09RA29B	H3M09RA29C	H3M09RA29J	1.224	.984	.666	.624	
15	H3M15RA29A	H3M15RA29B	H3M15RA29C	H3M15RA29J	1.552	1.312	.994	.952	
25	H3M25RA29A	H3M25RA29B	H3M25RA29C	H3M25RA29J	2.092	1.852	1.534	1.492	
37	H3M37RA29A	H3M37RA29B	H3M37RA29C	H3M37RA29J	2.740	2.500	2.183	2.140	

Add suffix S for metal snap latches and P for plastic. See page 386 for descriptions. Not available on basic connector.

ALL PLASTIC RIGHT ANGLE FEMALE RECEPTACLES FOR PCB MOUNTING



PHYSICAL PROPERTIES

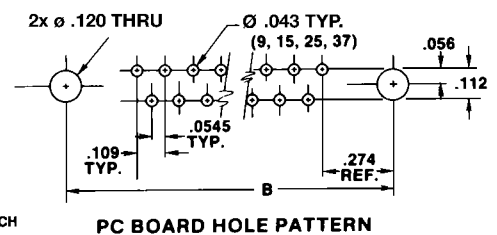
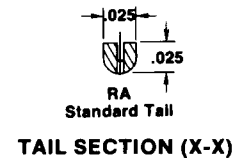
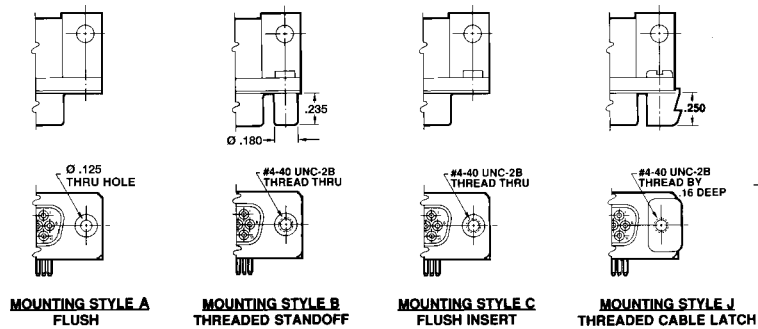
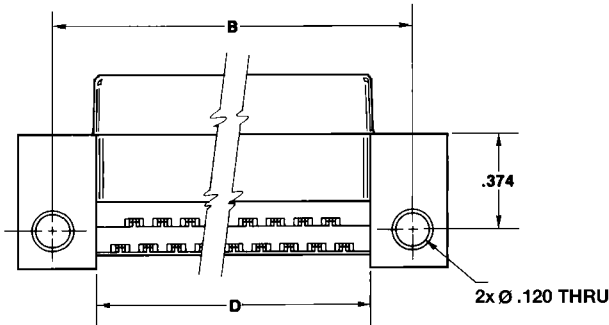
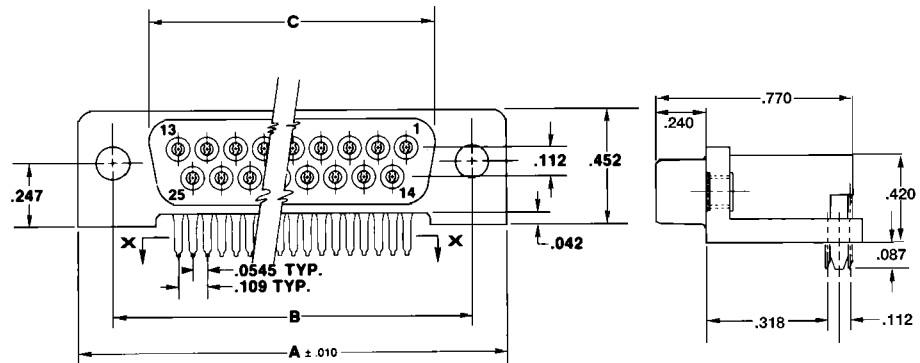
INSULATION MATERIAL: Glass filled thermoplastic rated UL 94V-0
 COLOR: Black
 CONTACTS: High strength copper alloy
 DURABILITY: Up to 500 insertions and withdrawals without degradation of performance, dependent upon contact plating thickness selected

ELECTRICAL PROPERTIES

OPERATING VOLTAGE: 600 VDC (sea level)
 CURRENT RATING: 5 Amperes
 CONTACT RESISTANCE: 10 milliohms max. @ rated current
 INSULATION RESISTANCE: 5000 megohms minimum
 DIELECTRIC WITHSTANDING VOLTAGE: 1000 VAC minimum

ENVIRONMENTAL PROPERTIES

TEMPERATURE RATING: -55°C TO 125°C



Ordering Information

NUMBER OF CONTACTS	BASIC CONNECTOR W/THRU HOLES	CATALOG NUMBER BY MOUNTING STYLE			DIMENSIONS			
		ROUND STANDOFF 4-40 THREAD	FLUSH INSERT 4-40 THREAD	LATCH W/STANDOFF & 4-40 THREADED INSERT	A	B	C	D
9	H3R09RA29A	H3R09RA29B	H3R09RA29C	H3R09RA29J	1.224	.984	.646	.624
15	H3R15RA29A	H3R15RA29B	H3R15RA29C	H3R15RA29J	1.552	1.312	.974	.952
25	H3R25RA29A	H3R25RA29B	H3R25RA29C	H3R25RA29J	2.092	1.852	1.514	1.492
37	H3R37RA29A	H3R37RA29B	H3R37RA29C	H3R37RA29J	2.740	2.500	2.162	2.140

Add suffix S for metal snap latches and P for plastic. See page 386 for descriptions. Not available on basic connector.

METAL SHELL RIGHT ANGLE MALE PINS FOR PCB MOUNTING



PHYSICAL PROPERTIES

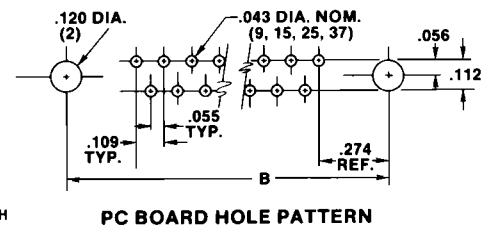
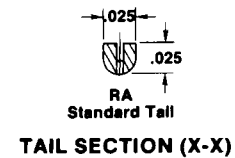
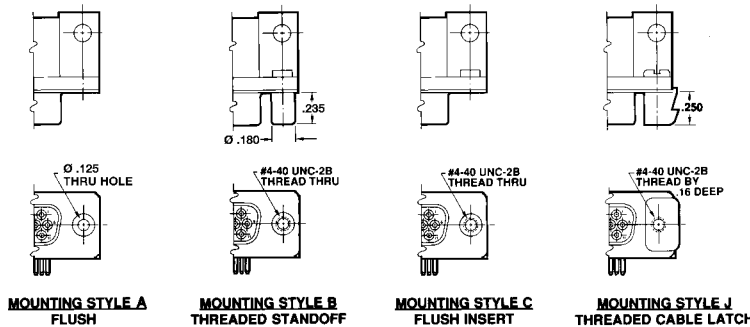
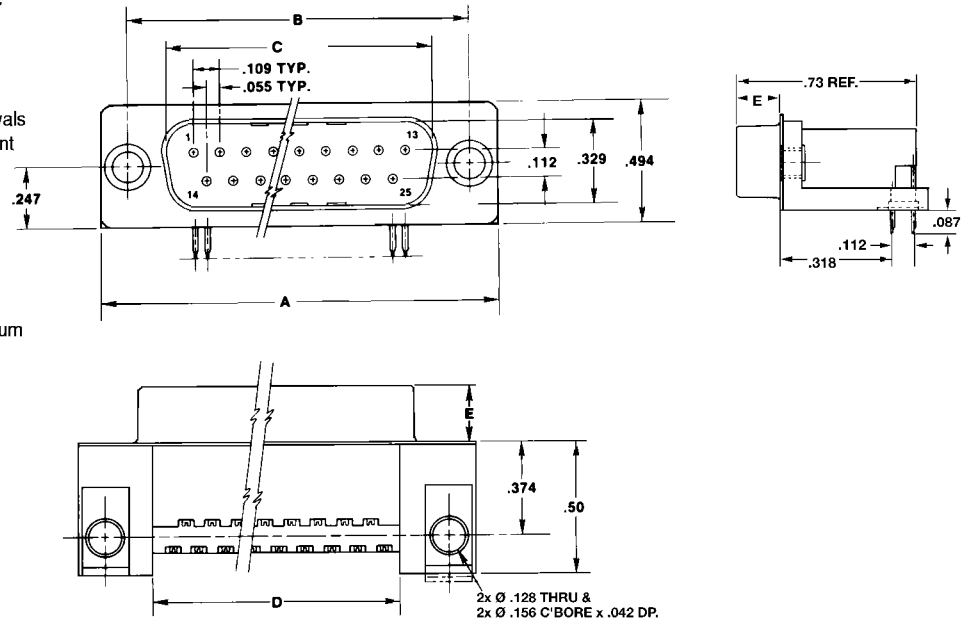
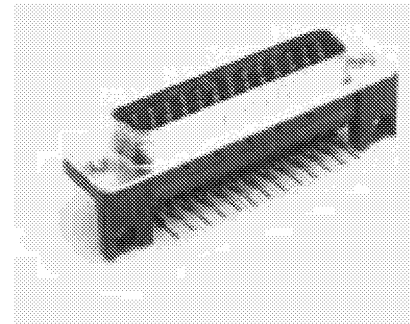
INSULATION MATERIAL: Glass filled thermoplastic rated UL 94V-0
 COLOR: Black
 CONTACTS: High strength copper alloy
 METAL SHELL: Steel, bright tin plate
 DURABILITY: Up to 500 insertions and withdrawals without degradation of performance, dependent upon contact plating thickness selected

ELECTRICAL PROPERTIES

OPERATING VOLTAGE: 600 VDC (sea level)
 CURRENT RATING: 5 Amperes
 CONTACT RESISTANCE: 10 milliohms max. @ rated current
 INSULATION RESISTANCE: 5000 megohms minimum
 DIELECTRIC WITHSTANDING VOLTAGE: 1000 VAC minimum

ENVIRONMENTAL PROPERTIES

TEMPERATURE RATING: -55°C TO 125°C



Ordering Information

NUMBER OF CONTACTS	BASIC CONNECTOR W/THRU HOLES	CATALOG NUMBER BY MOUNTING STYLE			DIMENSIONS				
		ROUND STANDOFF 4-40 THREAD	FLUSH INSERT 4-40 THREAD	LATCH W/STANDOFF & 4-40 THREADED INSERT	A	B	C	D	E
9	H5M09RA29A	H5M09RA29B	H5M09RA29C	H5M09RA29J	1.224	.984	.666	.624	.235
15	H5M15RA29A	H5M15RA29B	H5M15RA29C	H5M15RA29J	1.552	1.312	.994	.952	.235
25	H5M25RA29A	H5M25RA29B	H5M25RA29C	H5M25RA29J	2.092	1.852	1.534	1.492	.230
37	H5M37RA29A	H5M37RA29B	H5M37RA29C	H5M37RA29J	2.740	2.500	2.183	2.140	.230

Add suffix S for metal snap latches and P for plastic. See page 386 for descriptions. Not available on basic connector.