

Rack and Panel Connectors Subminiature Rectangular


SMP20

SMS20

FEATURES

- Lightweight
- Polarized by guides or screwlocks
- Screwlocks lock connectors together to withstand vibration and accidental disconnect
- Overall height kept to a minimum
- Floating contacts aid in alignment and in withstanding vibration
- Contacts, precision machined and individually gauged, provide high reliability
- Insertion and withdrawal forces kept low without increasing contact resistance
- Contact plating provides protection against corrosion, assures low contact resistance and ease of soldering

APPLICATIONS

For use wherever space is at a premium and a high quality connector is required in avionics, automation, communications, controls, instrumentation, missiles, computers and guidance systems.

MATERIAL SPECIFICATIONS

Contact Pin: Brass, gold plated

Contact Socket: Phosphor bronze, gold plated
(Beryllium copper available on request)

Guides: Stainless steel, passivated

Screwlocks: Stainless steel, passivated

Standard Body: Glass-filled dialyl phthalate per MIL-M-14, Model GDI-30F, green

ELECTRICAL SPECIFICATIONS

Current Rating: 7.5 A

Breakdown Voltage:

At sea level: 2000 V_{RMS}

At 70 000 feet [21 336 meters]: 500 V_{RMS}

PHYSICAL SPECIFICATIONS

Number of Contacts: 5, 7, 11, 14, 20, 26, 34, 42, 50, 75

Contact Spacing: 0.120" [3.05 mm]

Contact Gauge: #20 AWG

Minimum Creepage Path Between Contacts:

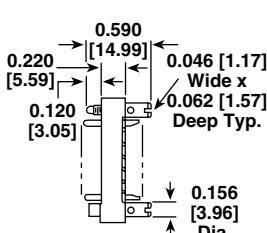
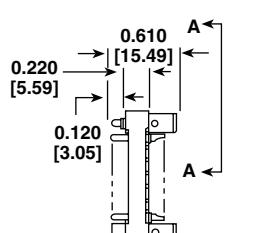
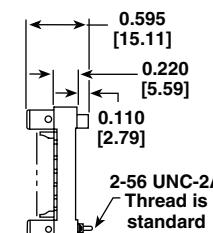
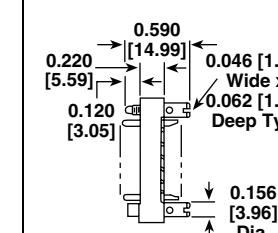
0.080" [2.03 mm]

Minimum Air Space Between Contacts: 0.050" [1.27 mm]

DIMENSIONS in inches [millimeters]

SMS With Fixed Standard Guides	SMDS - DETAIL B Dip Solder Contact Option	SMP With Fixed Standard Guides	SMDP - DETAIL C Dip Solder Contact Option
SMS With Fixed (SL) Screwlocks	SMP With Turnable (SK) Screwlocks	SMS With Turnable (SK) Screwlocks	SMP With Fixed (SL) Screwlocks

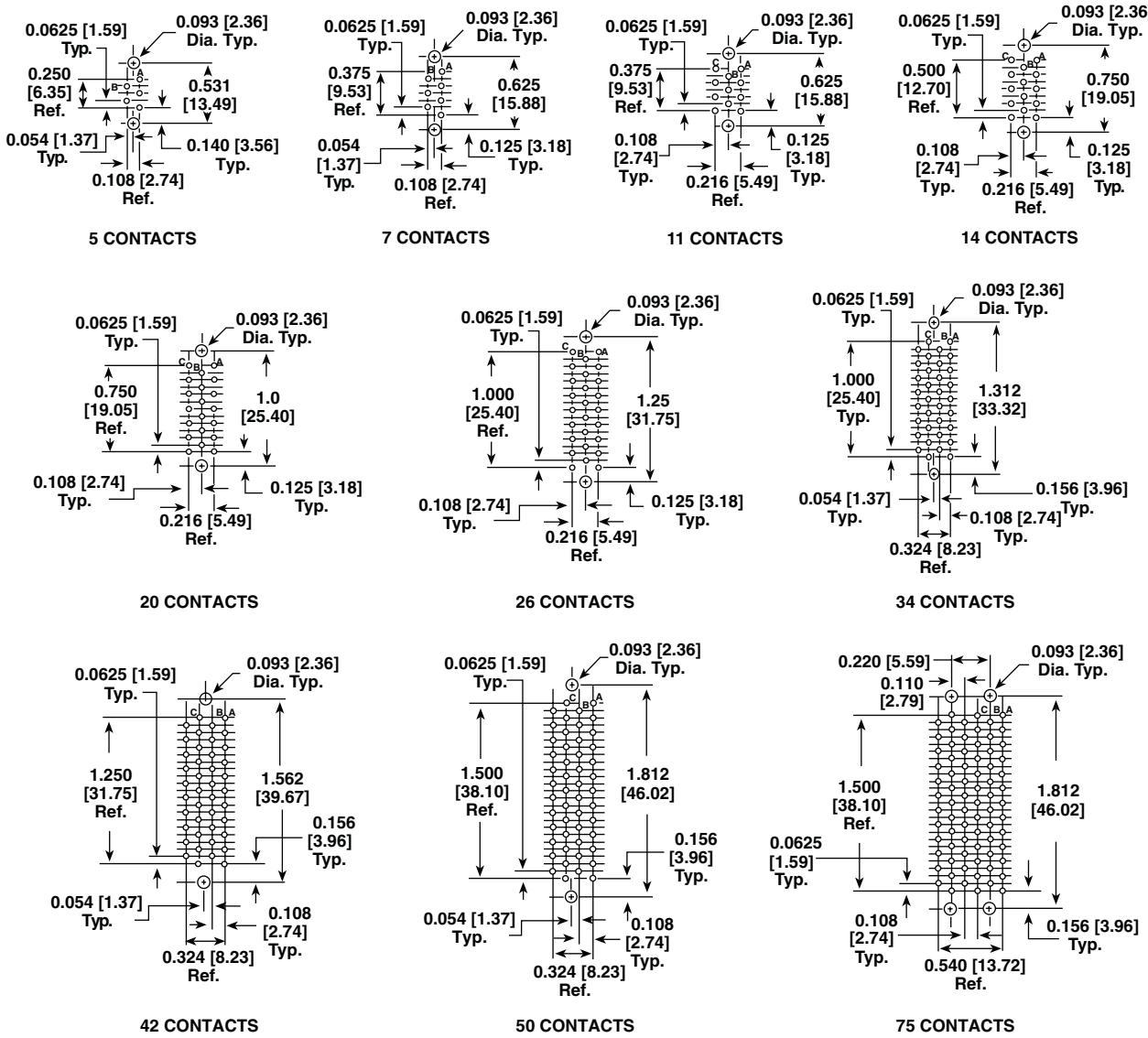
DIMENSIONS in inches [millimeters]

SMP With Turnable (SK030) Screwlocks	SMP With Turnable (SK035) Screwlocks	View A-A Typ.	SMS With Turnable (SK035) Screwlocks	SMP With Turnable (SK030) Screwlocks
				

TERMINAL VARIATIONS in inches [millimeters]

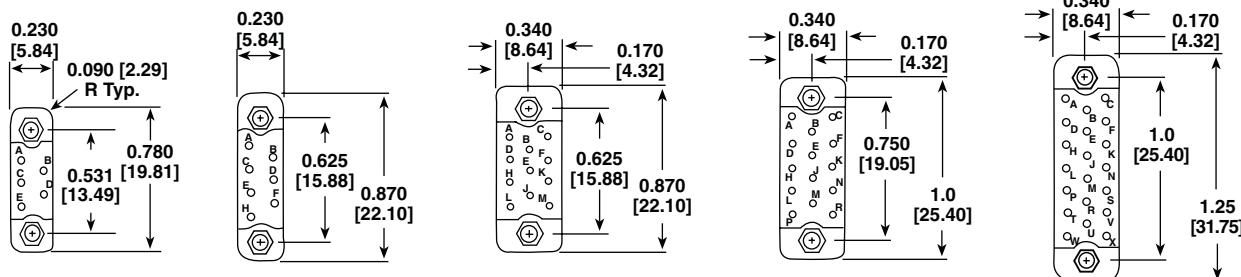
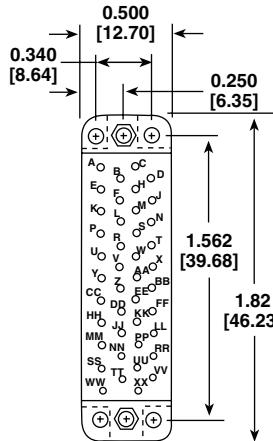
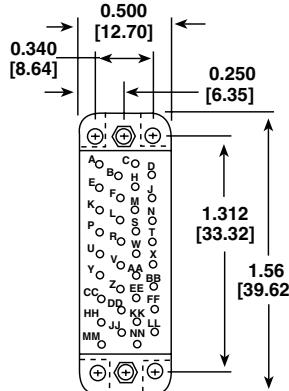
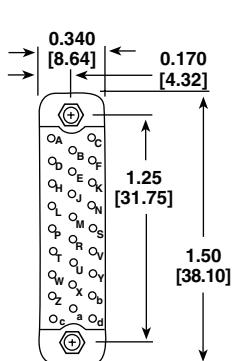
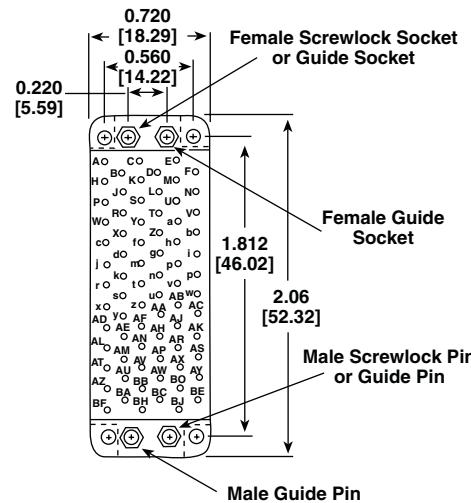
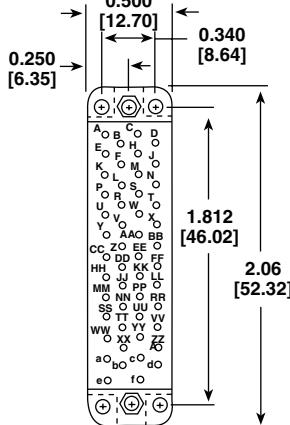
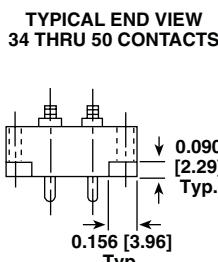
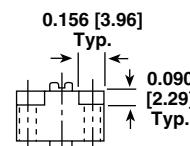
DIP SOLDER PC BOARD MOUNTING PATTERNS

Male (SMP) Connector is shown - Female is opposite. Contact row and Mating Hole C to C Dimensions also applies to Solder Cup Connectors.



DIMENSIONS in inches [millimeters]

NOTE: The views below show the wiring side of a pin model connector (female is opposite). Socket hardware is assembled at "A" contact end of a pin model connector.


5 CONTACTS
7 CONTACTS
11 CONTACTS
14 CONTACTS
20 CONTACTS

26 CONTACTS
34 CONTACTS
42 CONTACTS

50 CONTACTS
75 CONTACTS

**TYPICAL END VIEW
75 CONTACTS**

PANEL CUTOUT in inches [millimeters]

NUMBER OF CONTACTS	A	B	C	D	FIGURE
5	0.230 [5.84]	0.531 [13.49]	0.410 [10.41]	-	I
7	0.230 [5.84]	0.625 [15.88]	0.500 [12.70]	-	
11	0.340 [8.64]	0.625 [15.88]	0.530 [13.46]	-	
14	0.340 [8.64]	0.750 [19.05]	0.620 [15.75]	-	
20	0.340 [8.64]	1.0 [25.40]	0.910 [23.11]	-	
26	0.340 [8.64]	1.25 [31.75]	1.16 [29.46]	-	
34	0.500 [12.70]	1.312 [33.32]	1.16 [29.46]	0.343 [8.71]	
42	0.500 [12.70]	1.562 [39.68]	1.41 [35.81]	0.343 [8.71]	
50	0.500 [12.70]	1.812 [46.02]	1.66 [42.16]	0.343 [8.71]	
75	0.720 [18.29]	1.812 [46.02]	1.66 [42.16]	0.562 [14.28]	III

FIGURE I

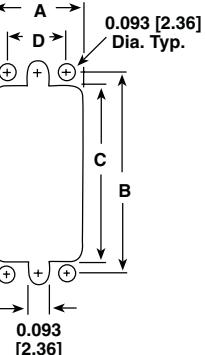


FIGURE II

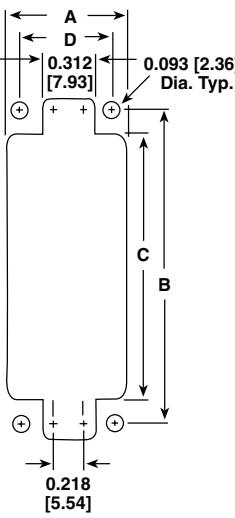


FIGURE III

ORDERING INFORMATION

C CONTACTS	SM MODEL	B CONTACT TYPE	S CONTACT STYLE	20 CONTACT SIZE	G PLATING	- 26	R (OPTIONAL)	027 ⁽¹⁾ HARDWARE OPTIONS
(OPTIONAL) Closed entry socket contacts only. Omit for standard contacts.	Subminiature		P = Pin S = Socket	#20 AWG	Optional plating available: G = Gold (0.00003 thick) over nickel G5 = Gold (0.00005 thick) over nickel Omit designator for gold (0.00001 thick) over nickel	5, 7, 11, 14, 20, 26, 34, 42, 50, 75	(OPTIONAL) R = Reversed guides or screwlocks Omit for standard	
								(Omit if no hardware desired) 027 = Slotted cres guides 0.090" [2.29 mm] diameter SK = Turnable screwlocks with 2-56 threads SK3 = Turnable screwlocks with 3-48 threads SL = Fixed screwlocks with 2-56 threads SL3 = Fixed screwlocks with 3-48 threads SK030 = Turnable screwlocks with short slotted knobs SK035 = Turnable screwlocks with socket head knobs SK3030 = Turnable screwlocks with short slotted knobs with 3-48 threads SK3035 = Turnable screwlocks with socket head knobs with 3-48 threads
(OPTIONAL) B = Beryllium copper, socket contacts (Solder cup) D = Dip solder contacts								
EXAMPLES: SMBS20-26SK035 = Female, 26 beryllium copper socket contacts with socket head knobs on turnable screwlocks for #20 AWG wiring. SMP20-14SL3 = Male, 14 contact pins, fixed screwlocks with 3-48 threads for #20 AWG wiring.								

Note
⁽¹⁾ To order complete connector with hardware supplied unassembled, add suffix "UA" on end of hardware designation.

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