



Rack and Panel Connectors Military, MIL-C-28748/7/8 Qualified and Commercial Microminiature Rectangular with Optional Hoods



FEATURES

- Qualified to MIL-C-28748/7/8
- Solder cup contacts
- Dip solder contacts
- Fixed and turnable screwlocks
- Optional closed entry socket contacts

APPLICATIONS

Especially suited for use in airborne, instrumentation and portable equipment applications or wherever the following requirements must be met: Minimum space and weight without sacrifice of performance, high quality materials, long service life, high vibration and shock resistance and positive locking.

ELECTRICAL SPECIFICATIONS

Current Rating: Model MM22 = 5 A

Model MM24 = 3 A

Breakdown Voltage: At sea level: 2000 V_{RMS}

At 70 000 feet: 500 V_{RMS}

MATERIAL SPECIFICATIONS

Contact Pin: Phosphor bronze

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

Contact Plating: Gold

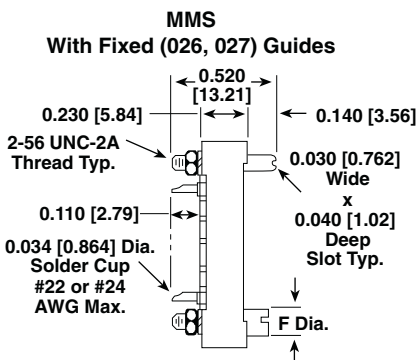
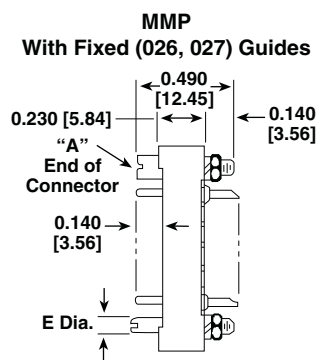
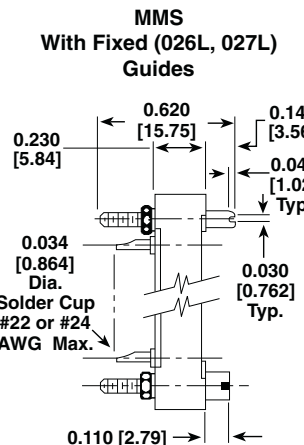
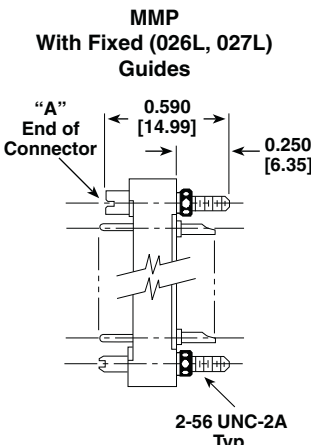
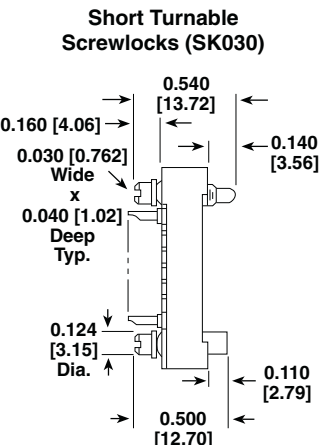
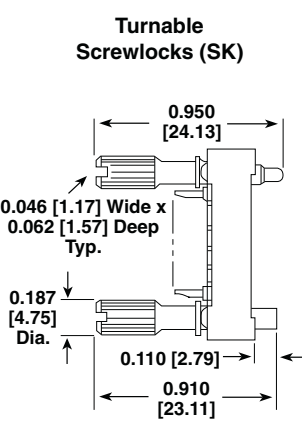
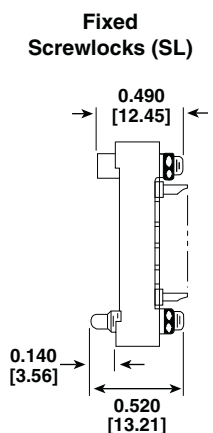
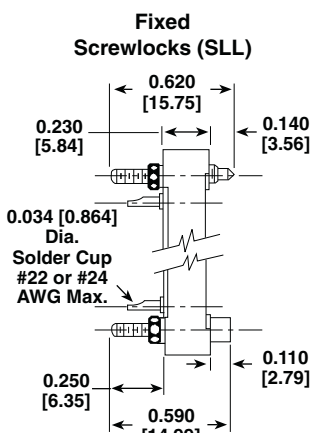
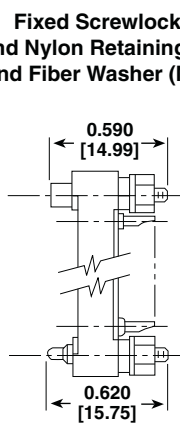
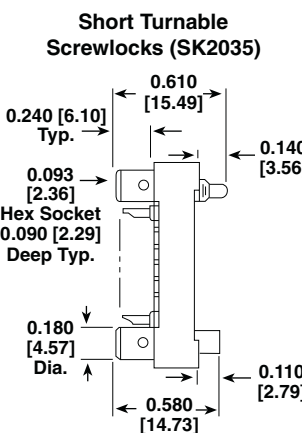
Screwlocks: Stainless steel, passivated

Guides: Brass, gold plated or stainless steel, passivated

Standard Body: Glass-filled diallyl phthalate per MIL-M-14, Model SDG-F, green

DIMENSIONS in inches [millimeters]

MMS With Solder Cup Contacts		MMP With Solder Cup Contacts		MMDS With Dip Solder Contacts	MMDP With Dip Solder Contacts
CONTACT GAUGE	B DIAMETER	CONTACT GAUGE	C DIP TAIL LENGTH	D DIAMETER	
22 AWG	0.030 ± 0.001 [0.762 ± 0.025]	22 AWG	0.160 or 0.350 [4.06 or 8.89] nom.	0.025 [0.635]	
24 AWG	0.025 ± 0.001 [0.635 ± 0.025]	24 AWG	0.160 or 0.350 [4.06 or 8.89] nom.	0.025 [0.635]	

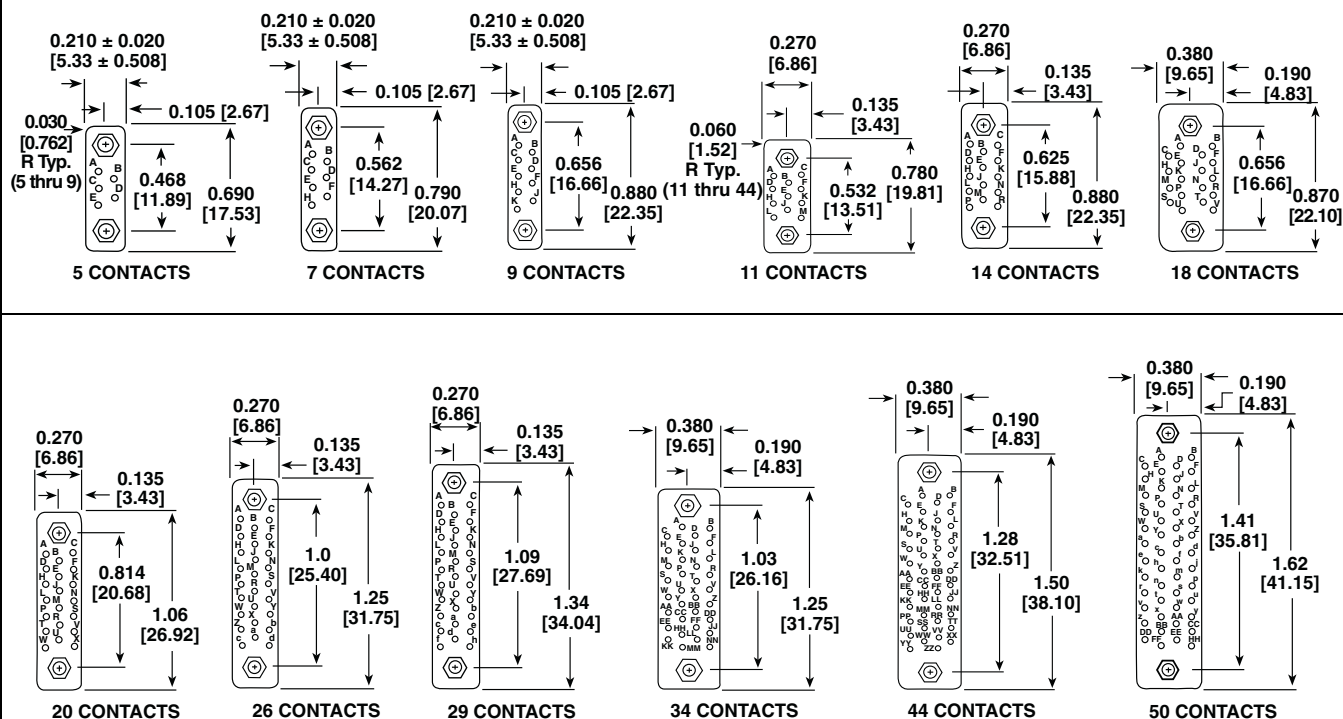
DIMENSIONS in inches [millimeters]				
MMS With Fixed (026, 027) Guides  0.230 [5.84] 2-56 UNC-2A Thread Typ. 0.110 [2.79] 0.034 [0.864] Dia. Solder Cup #22 or #24 AWG Max. 0.520 [13.21] 0.140 [3.56] 0.030 [0.762] Wide x 0.040 [1.02] Deep Slot Typ. F Dia.	MMP With Fixed (026, 027) Guides  0.230 [5.84] "A" End of Connector 0.490 [12.45] 0.140 [3.56] E Dia.	HARDWARE TYPE	E DIAMETER	F DIAMETER
		026	0.078 [1.98]	0.125 [3.17]
		026L	0.078 [1.98]	0.125 [3.17]
		027	0.078 [1.98]	0.125 [3.17]
		027L	0.078 [1.98]	0.125 [3.17]
MMS With Fixed (026L, 027L) Guides  0.230 [5.84] 0.620 [15.75] 0.140 [3.56] 0.040 [1.02] Typ. 0.034 [0.864] Dia. Solder Cup #22 or #24 AWG Max. 0.030 [0.762] Typ. 0.110 [2.79]	MMP With Fixed (026L, 027L) Guides  "A" End of Connector 0.590 [14.99] 0.250 [6.35] 2-56 UNC-2A Typ.	Short Turnable Screwlocks (SK030)  0.160 [4.06] 0.030 [0.762] Wide x 0.040 [1.02] Deep Typ. 0.540 [13.72] 0.140 [3.56] 0.124 [3.15] Dia. 0.500 [12.70] 0.110 [2.79]	Turnable Screwlocks (SK)  0.950 [24.13] 0.046 [1.17] Wide x 0.062 [1.57] Deep Typ. 0.187 [4.75] Dia. 0.110 [2.79] 0.910 [23.11]	
Fixed Screwlocks (SL)  0.490 [12.45] 0.140 [3.56] 0.520 [13.21]	Fixed Screwlocks (SLL)  0.620 [15.75] 0.230 [5.84] 0.140 [3.56] 0.034 [0.864] Dia. Solder Cup #22 or #24 AWG Max. 0.250 [6.35] 0.590 [14.99] 0.110 [2.79]	Fixed Screwlocks And Nylon Retaining Nut And Fiber Washer (NSL)  0.590 [14.99] 0.620 [15.75]	Short Turnable Screwlocks (SK2035)  0.240 [6.10] Typ. 0.610 [15.49] 0.140 [3.56] 0.093 [2.36] Hex Socket 0.090 [2.29] Deep Typ. 0.180 [4.57] Dia. 0.580 [14.73] 0.110 [2.79]	

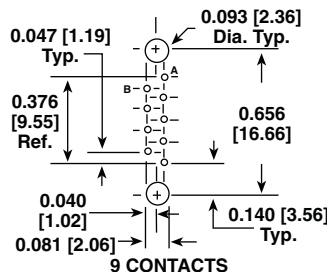
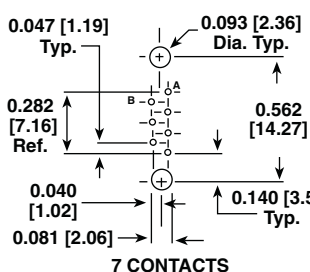
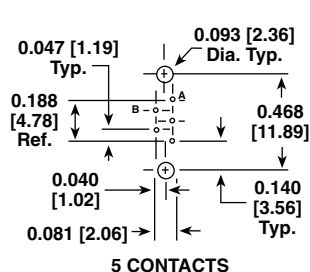
HARDWARE MATING CHART

HARDWARE MODEL	MATES WITH HARDWARE MODEL	NOTE:
026	026, 026L	
027	027, 027L	EITHER MMP OR MMS CONNECTORS MAY BE ORDERED WITH ANY TYPE OF HARDWARE SHOWN. EXAMPLES: 1. MMP WITH 026 HARDWARE WOULD MATE WITH AN MMS WITH 026 HARDWARE. 2. MMS WITH SK HARDWARE WOULD MATE WITH AN MMP WITH SL OR NSL HARDWARE. 3. MMS WITH SL2 HARDWARE WOULD MATE WITH AN MMP WITH SK2 OR SK2030 HARDWARE.
SK	SL, NSL or SLL	
SK030	SL, NSL or SLL	
SK2	SL2, NSL2 or SL2L	
SK2030	SL2, NSL2 or SL2L	
SK2035	SL2, NSL2 or SL2L	

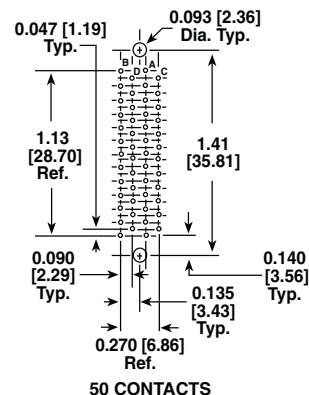
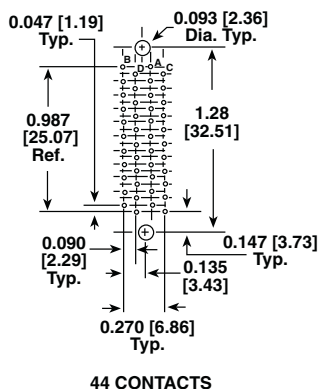
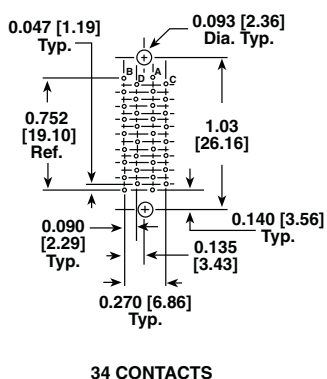
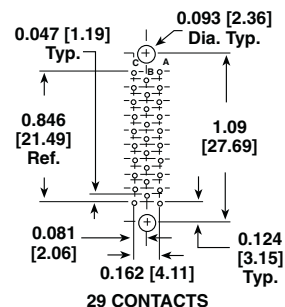
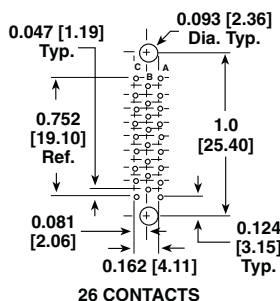
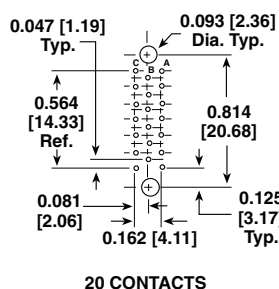
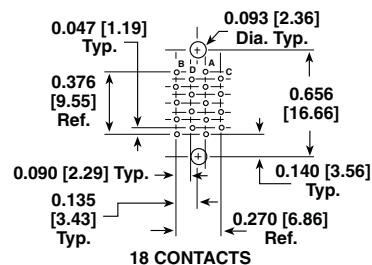
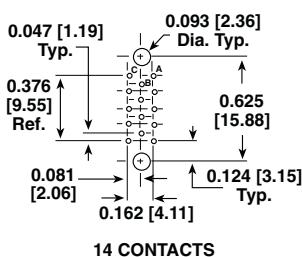
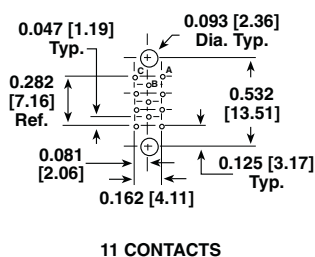
DIMENSIONS in inches [millimeters]

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

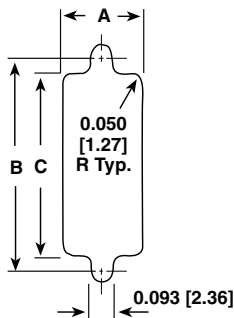


MOUNTING VARIATIONS in inches [millimeters]

DIP SOLDER PC BOARD MOUNTING PATTERNS

Male (MMP) connector shown - female is opposite. Contact, contact row and mating hole C_L to C_L . Dimensions also applies to solder cup style connectors.

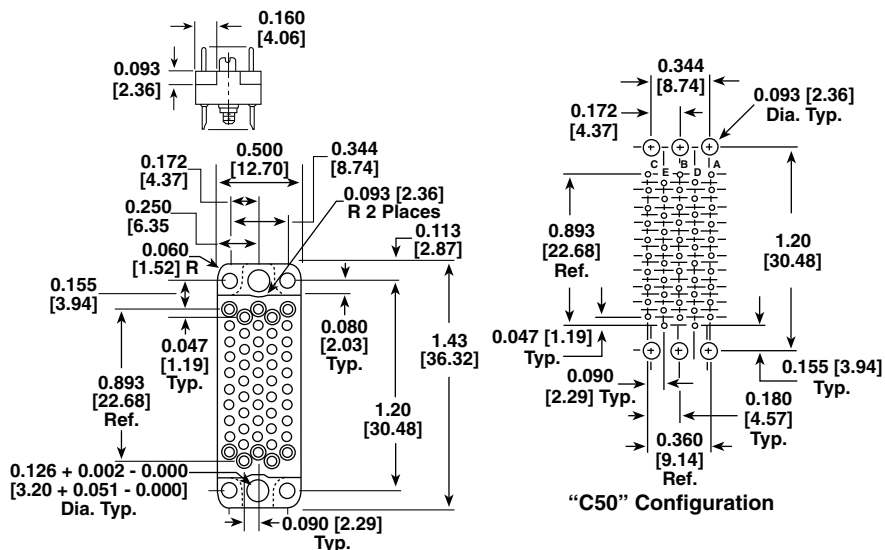


PANEL CUTOUT in inches [millimeters]

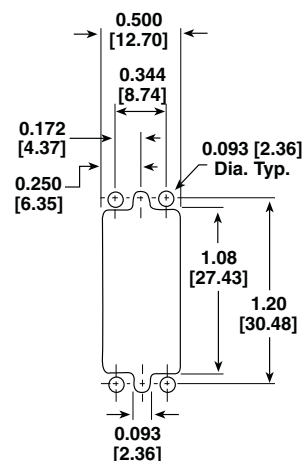
	NUMBER OF CONTACTS	A	B	C	NUMBER OF CONTACTS	A	B	C
	5	0.210 [5.33]	0.468 [11.89]	0.340 [8.64]	20	0.270 [6.86]	0.814 [20.68]	0.690 [17.53]
	7	0.210 [5.33]	0.562 [14.27]	0.440 [11.18]	26	0.270 [6.86]	1.0 [25.40]	0.870 [22.10]
	9	0.210 [5.33]	0.656 [16.66]	0.530 [13.46]	29	0.270 [6.86]	1.09 [27.69]	0.970 [24.64]
	11	0.270 [6.86]	0.532 [13.51]	0.410 [10.41]	34	0.380 [9.65]	1.03 [26.16]	0.910 [23.11]
	14	0.270 [6.86]	0.625 [15.88]	0.500 [12.70]	44	0.380 [9.65]	1.28 [32.51]	1.16 [29.46]
	18	0.380 [9.65]	0.656 [16.66]	0.530 [13.46]	50	0.380 [9.65]	1.41 [35.81]	1.28 [32.51]

DIMENSIONS in inches [millimeters]

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


PANEL CUTOUT

in inches [millimeters]


DIP SOLDER PC BOARD MOUNTING PATTERNS

Male (MMP) connector shown - female is opposite. Contact, contact row and mating hole C_L to C_L dimensions also applies to solder cup style connectors.

HOOD VARIATIONS in inches [millimeters]

027H					
SKH or SK2H					
NUMBER OF CONTACTS	A ± 0.016 [0.406]	B ± 0.030 [0.76]	C	D ± 0.016 [0.406]	"E" CABLE OPENING SQ. IN. [mm²]
5	0.690 [17.53]	0.650 [16.51]	0.468 [11.89]	0.310 [7.87]	0.028 [0.711]
7	0.780 [19.81]	0.650 [16.51]	0.562 [14.27]	0.440 [11.18]	0.037 [0.940]
9	0.870 [22.10]	0.650 [16.51]	0.656 [16.66]	0.500 [12.70]	0.052 [1.321]
11	0.780 [19.81]	0.650 [16.51]	0.532 [13.51]	0.440 [11.18]	0.054 [1.372]
14	0.870 [22.10]	0.650 [16.51]	0.625 [15.88]	0.500 [12.70]	0.076 [1.930]
20	1.06 [26.92]	0.650 [16.51]	0.814 [20.68]	0.620 [15.75]	0.105 [2.667]
26	1.25 [31.75]	0.650 [16.51]	1.00 [25.40]	0.620 [15.75]	0.105 [2.667]
29	1.34 [34.04]	0.650 [16.51]	1.09 [27.67]	0.620 [15.75]	0.105 [2.667]
34	1.25 [31.75]	0.650 [16.51]	1.03 [26.16]	0.500 [12.70]	0.160 [4.064]
44	1.50 [38.10]	1.17 [29.72]	1.28 [32.51]	0.500 [12.70]	0.190 [4.826]
50	1.62 [41.15]	1.17 [29.72]	1.41 [35.81]	0.620 [15.75]	0.202 [5.131]



ORDERING INFORMATION

CONNECTOR							HARDWARE		HOODS		
C	MM	D1	B	P	22	G	-	5	R	026 ⁽¹⁾	H
CONTACTS	MODEL	TERMINATION	(OPTIONAL)	CONTACT STYLE	CONTACT SIZE	PLATING		NUMBER OF CONTACTS	(OPTIONAL)	HARDWARE VARIATIONS	HOOD VARIATIONS
	Microminiature			P = Pin S = Socket	22 AWG = 0.030" [0.762 mm] diameter 24 AWG = 0.025" [0.635 mm] diameter				R = Reversed guides or screwlocks (Omit for standard)		(Omit if no Hood desired) 027H = Hood (top cable opening) with standard 027 Slotted cres guides This option is not available in the C50 contact size SKH = Hood (top cable opening) with long SK-model turnable screwlocks (3-48 NF) and knobs This option is not available in the 34, 44, 50 and C50 contact sizes. SK2H = Hood (top cable opening) with long SK-model turnable screwlocks (2-56 NF) and knobs. This option is not available in the C50 contact size.
		(OPTIONAL) Dip solder termination optional. (Omit for standard solder cup) Select tail length: D1 = 0.160" [4.06 mm] nominal D2 = 0.350" [8.89 mm] nominal	B = Beryllium copper contacts optional on solder cup socket contacts only . (Omit for standard contacts)		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, 9, 11, 14, 18, 20, 26, 29, 34, 44 or 50 ⁽²⁾			
(OPTIONAL) Closed entry socket contacts optional on 22 AWG socket contacts only . (Omit for standard contacts)										(Omit if no hardware desired) 026 = Slotted brass guides 0.078" [1.98 mm] diameter 026L = Long slotted brass guides 0.078" [1.98 mm] diameter 027 = Slotted cres guides 0.078" [1.98 mm] diameter 027L = Longslotted cres guides 0.078" [1.98 mm] diameter SL = Chassis mounted fixed screwlocks (3-48 thread) SL2 = Chassis mounted fixed screwlocks (2-56 thread) SLL = Chassis mounted fixed screwlocks long (3-48 thread) SL2L = Chassis mounted fixed screwlocks long (2-56 thread) NSL = Chassis mounted fixed screwlocks (3-48 thread) with nylon retaining nuts and fiber washers NSL2 = Chassis mounted fixed screwlocks (3-48 thread) with nylon retaining nuts and fiber washers SK = Cable mounted - turnable screwlocks (3-48 thread) SK2 = Cable mounted - turnable screwlocks (2-56 thread) SK030 = Cable mounted - turnable screwlocks (3-48 thread) with short knobs SK2030 = Cable mounted - turnable screwlocks (2-56 thread) with short knobs SK2035 = Cable mounted - tunable screwlocks (2-56 thread) with socket head knobs	

Notes

- ⁽¹⁾ To order complete connector with hardware supplied unassembled, add suffix "UA" on end of hardware designation.
- ⁽²⁾ 50 contact connectors are available in either the standard 4-row contact arrangement per MIL-C-28748 or a special 5-row contact arrangement. To order the special 5-row contact arrangement, use the designator "C50" for the number of contacts.



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Material Category Policy

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.