.100" x .100" Low Profile, SMT Straight, Straight and Rt Angle Through-Hole

2500 Series



- Low profile, space saving design
- Center slot polarization prevents mis-insertions and reduces insertion time
- Dual slot polarization means broader compatibility with competitive polarization designs (not 10 pos.)
- Optional retainer clip for locking sockets in place and increasing connection reliability in vibration-prone environments
- Optional high temperature insulator suitable for "no lead" soldering operations
- High temperature option in through-hole version suitable for "paste in hole" reflow soldering techniques
- Exposed solder tails (on right angle version) provide ease of cleaning and reduced repair costs
- Straight surface mount version available
- See regulatory information appendix (RIA) for chemical compliance information

Date Modified: March 24, 2008

TS-0770-E Sheet 1 of 5

Physical

Insulator

Glass Filled Polyester (PBT), Glass Filled Polyester (PCT)-Material:

High Temperature Option

Flammability: UL 94V-0

Color: Gray (PBT), Beige (PCT) or Black (PCT)

Contact Material: Copper Alloy

Plating

Underplating: 100 µ" [2.54 µm] Nickel - Overall Wiping Area: Gold (See Ordering Information)

Solder Tails: 200 µ" [5.08 µm] Tin Lead or Matte Tin (See Ordering Information) Marking: 3M Logo, Part Identification Number and Orientation Triangle

Electrical

Current Rating: 2A

Insulation Resistance: >1 x 10⁹ W at 500 V_{DC} Withstanding Voltage: 1000 V_{RMS} at Sea Level

Environmental

Temperature Rating: -55° C to $+105^{\circ}$ C

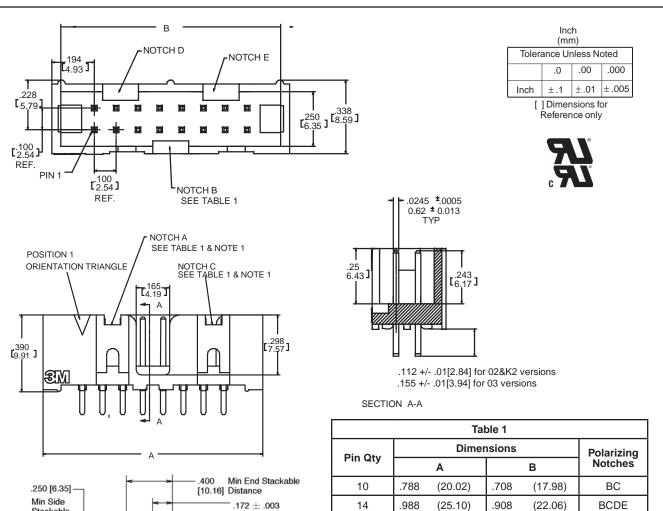
Process Rating: 260°C, (High Temperature and PCT insulator versions only), single pass,

(profile per J-STD-020C) PBT insulator version, maximum molded

insulator temperature 191°C (solder wave process only)

Moisture Sensitivity Level: 1 (per J-STD-020C)

UL File No.: E68080



Pin Qty		Dimer	Polarizing						
Pin Qty	Α			В	Notches				
10	.788	(20.02)	.708	(17.98)	ВС				
14	.988	(25.10)	.908	(22.06)	BCDE				
16	1.088	(27.64)	1.008	(25.60)	ABCDE				
20	1.288	(32.72)	1.208	(30.68)	ABCDE				
24	1.488	(37.80)	1.408	(35.76)	ABCDE				
26	1.588	(40.34)	1.508	(38.30)	ABCDE				
30	1.788	(45.42)	1.708	(43.38)	ABCDE				
34	1.988	(50.50)	1.908	(48.46)	ABCDE				
40	2.288	(58.12)	2.208	(56.08)	ABCDE				
50	2.788	(70.82)	2.708	(68.78)	ABCDE				
60	3.288	(83.52)	3.208	(81.48)	ABCDE				
64	3.488	(88.60)	3.408	(86.56)	ABCDE				

Stackable

Distance

 \oslash .035 \pm .003 [0.89]

Optional Hole for

Polarization Peg

Position 1 as indicated

by Triangle

- 1. Notches A & C will accomodate 3M Polarizing Keys (3M Part #3518 or N3518).
- 2. Contact tails .0245 [0.622] wire with .0075 [0.191] corner radii & .028 [.072] diagonal.

[4.37]

.035 [0.89] Dia

 0.050 ± 0.003 [1.27]

 $\pm .003$

[2.54]

 $\pm .003$

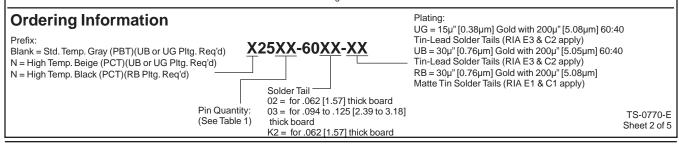
[2.54]

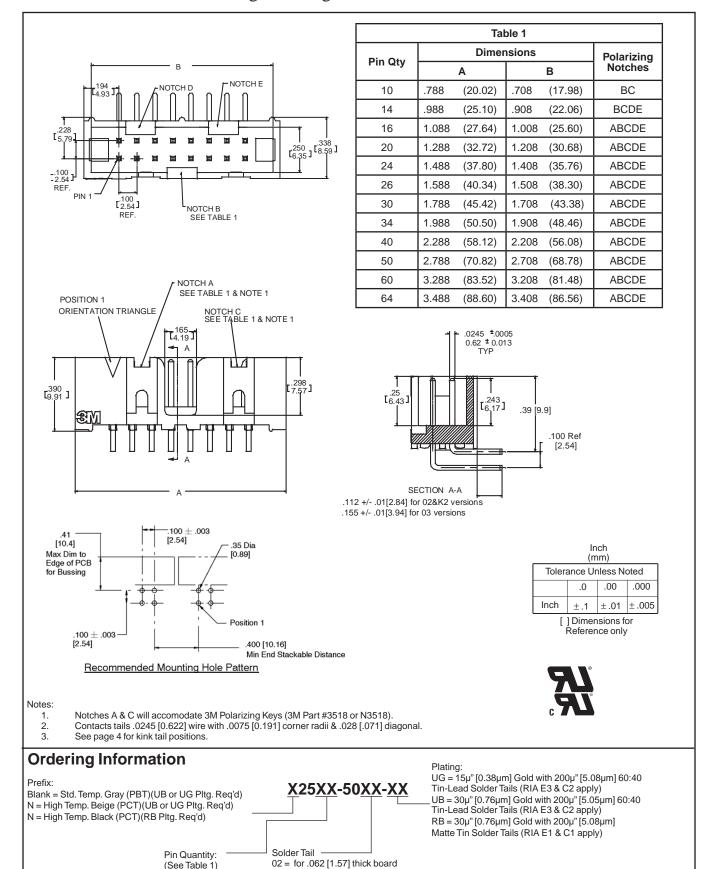
See page 4 for kink tail positions.

0

4. Solder stand offs facilitate .01 clearance above board for reflow soldering.

Recommended P.C. Board Hole Pattern (Shown for mounting side of board.)



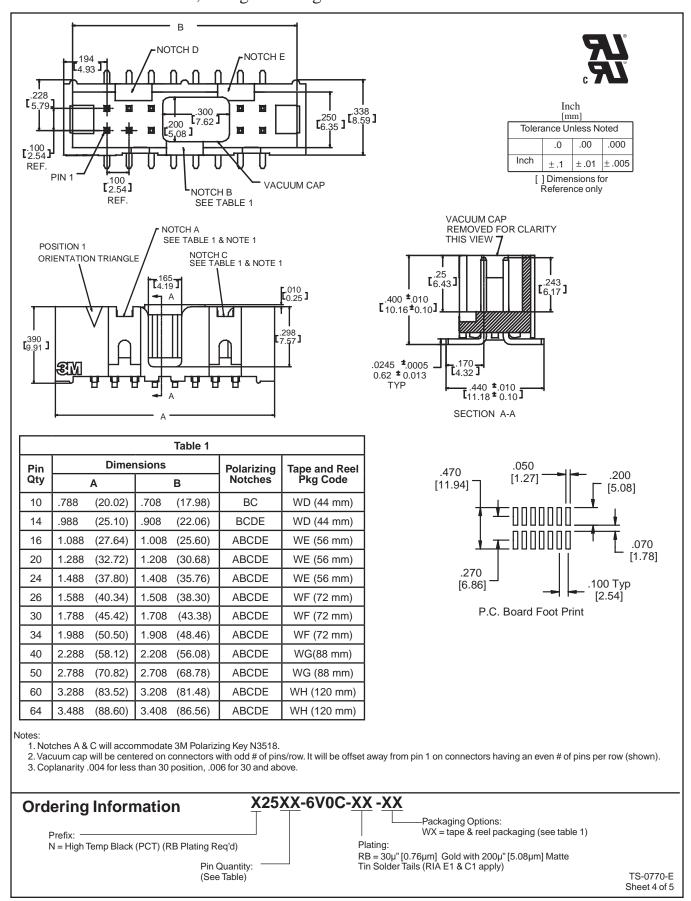


03 = for .094 to .125 [2.39 to 3.18] thick board

K2 = for .062 [1.57] thick board

TS-0770-E

Sheet 3 of 5

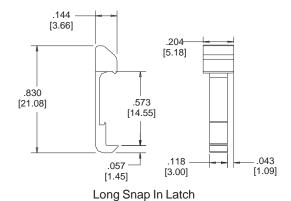


2500 & 3000 Series Shrouded Header							
Total Number of Pins	Number of Tails Kinked	Positions Kinked					
10	4	3 4 7 8					
14	4	3	4	11	12		
16	4	3	4	13	14		
20	4	3	4	17	18		
24	4	3	4	21	22		
26	4	3	4	23	24		
30	4	5	6	25	26		
34	4	7	8	27	28		
36	4	7	8	27	28		
40	4	7	8	33	34		
50	4	7	8	43	44		
60	4	11	12	49	50		
64	4	11	12	53	54		

Kinked Tail Detail:

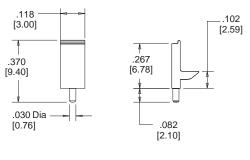
Kink is located .05" below bottom surface of plastic. External radius of kink toward part centerline.

Part Number	Material	Color
3505-33B	Nylon	Black
3505-33	Nylon	Gray



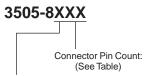
Note: Latches not compatible with reflow soldering. For reflow soldering, attach latches after soldering.

	Part Number	Material	Color						
	3201-3	PCT	Black						
3201-1		PBT	Gray						
1	0								

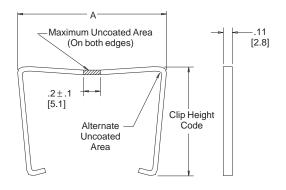


Polarizing Post

Connector Pin Qty	Dimension A
10	.81 (20.6)
14	1.02 (25.9)
16	1.12 (28.4)
20	1.32 (33.5)
24	1.52 (38.7)
26	1.63 (41.4)
30	1.83 (46.4)
34	2.03 (51.6)
40	2.33 (59.2)
50	2.83 (71.9)
60	3.33 (84.6)
64	3.53 (89.7)



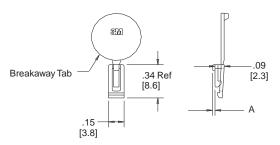
Clip Height Code 0 = .31 [7.9] for Sockets W/O Strain Relief 1 = .53 [13.5] for Sockets with Strain Relief



Short/Long Socket Retainer Clip

Note: Stainless steel with gray polyurethane coating.

Part Number	Material	Color	Dim A
N3518	LCP	Black	0.02
3518	PBT	Grav	0.02



Note: 3M™ Scotch-Weld™ Epoxy Adhesive 2216 B/A

Polarizing Keys

TS-0770-E Sheet 5 of 5

Regulatory Information Appendix

3M Electronic Solutions Division/Interconnect

EUROPE

Appendix E1: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

This product is RoHS Compliant 2005/95/EC.

"RoHS Compliant 2005/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the Warranty stated below.

Appendix E2: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

This product contains lead in the compliant pin area in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/747/EC.

"RoHS Compliant 2005/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the Warranty stated below.

Appendix E3: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment as amended by Commission Decision 2005/618/EC.

This product contains lead in the solder tail area in excess of the maximum concentration value allowed.

Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the Warranty stated below.

Appendix E4: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

This product contains decaBDE in the insulating material in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/717/EC.

"RoHS Compliant 2005/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the Warranty stated below.

Appendix E5: European Union RoHS

Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, as amended by EU Commission Decision 2005/618/EC.

This product contains lead in excess of the maximum concentration value allowed but is compliant by exemption under Item 6 of the Annex to the Directive.

"RoHS Compliant 2005/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the Warranty stated below.

CHINA

Appendix C1: China RoHS



Electronic Industry Standard of the People's Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does not** contain any of the following substances in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the Warranty stated below.

Appendix C2: China RoHS



Electronic Industry Standard of the People's Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does** contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

The numerical reference in the symbol above should not be construed as a representation regarding the product's life or an extension of a product warranty. The product warranty is stated below. In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the product Warranty stated below.

产品中有毒有害物质或元素的名称及含量 Name and Content of Hazardous Substances or Elements

部件名称	有毒有害物质或元素 (Hazardous Substances or Elements)						
(Part or Component Name)	铅(Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)	
端子镀层(contact plating)	×	0	0	0	0	0	

〇: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。(Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006,)

^{×:} 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。(Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.)

Appendix C3: China RoHS

Electronic Industry Standard of the People's Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part **does** contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's best knowledge and belief based upon information provided by third party suppliers to 3M.

The numerical reference in the symbol above should not be construed as a representation regarding the product's life or an extension of a product warranty. The product warranty is stated below. In the event any product is proven not to conform with 3M's Regulatory Information Appendix, then 3M's entire liability and Buyer's exclusive remedy will be in accordance with the product Warranty stated below.

产品中有毒有害物质或元素的名称及含量 Name and Content of Hazardous Substances or Elements

部件名称	有毒有害物质或元素 (Hazardous Substances or Elements)					
(Part or Component Name)	铅(Ph)	汞 (Hg)	鍋 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
合金(Metal alloy)	×	0	0	0	0	0
		4				

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/Tl1363-2006 标准规定的限量要求以下。(Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/Tl1363-2006.)
X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/Tl1363-2006 标准规定的限量要求。(Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/Tl1363-2006.)

Important Notice

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3M Electronics Solutions Division

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