

3M™ CF Card Header

CompactFlash™ Type II, Long Guides, Surface Mount

7E50 Series



- Headers mate with both CompactFlash™ Type I and Type II cards
- Polarization options for top or bottom boardmount
- Extended guide rails enable accurate and easy card insertion
- Single row surface mount solder tails facilitate auto placement and IR soldering
- Optional 2 mm board standoff enables board population
- Meets CFA standards for known compatibility and reliability
- Metal brace provides stability for ejector attachment
- Multiple styles of ejector available
- Optional ejector can be purchased pre-assembled or separately
- Optional Tape and Reel or Tray packaging for automated assembly
- RoHS compliant. See paragraphs E1 and C1 of Regulatory Information Appendix

Date Modified: October 14, 2008

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Physical

Insulation:

Material: High Temperature Thermoplastic

Flammability: UL 94V-0

Color: Beige

Contact:

Material: Copper Alloy

Plating:

Underplating: 2.03 μm [80 μ''] Nickel

Wiping Area: 0.38 μm [15 μ''] or 0.76 μm [30 μ''] Gold

Solder Tails: 3.81 μm [150 μ''] Matte Tin or Gold Flash

Marking: 3M Logo

Electrical

Current Rating: 0.5 A

Insulation Resistance: $10^3 \Omega$ at 500 V_{DC}

Withstanding Voltage: 500 V_{AC} for 1 minute

Environmental

Temperature Rating: -40°C to +85°C

Process Rating: Maximum 260 C (per J-STD-020C)

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

CompactFlash is a registered trademark of Sandisk Corporation.

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<http://www.3M.com/interconnects/>

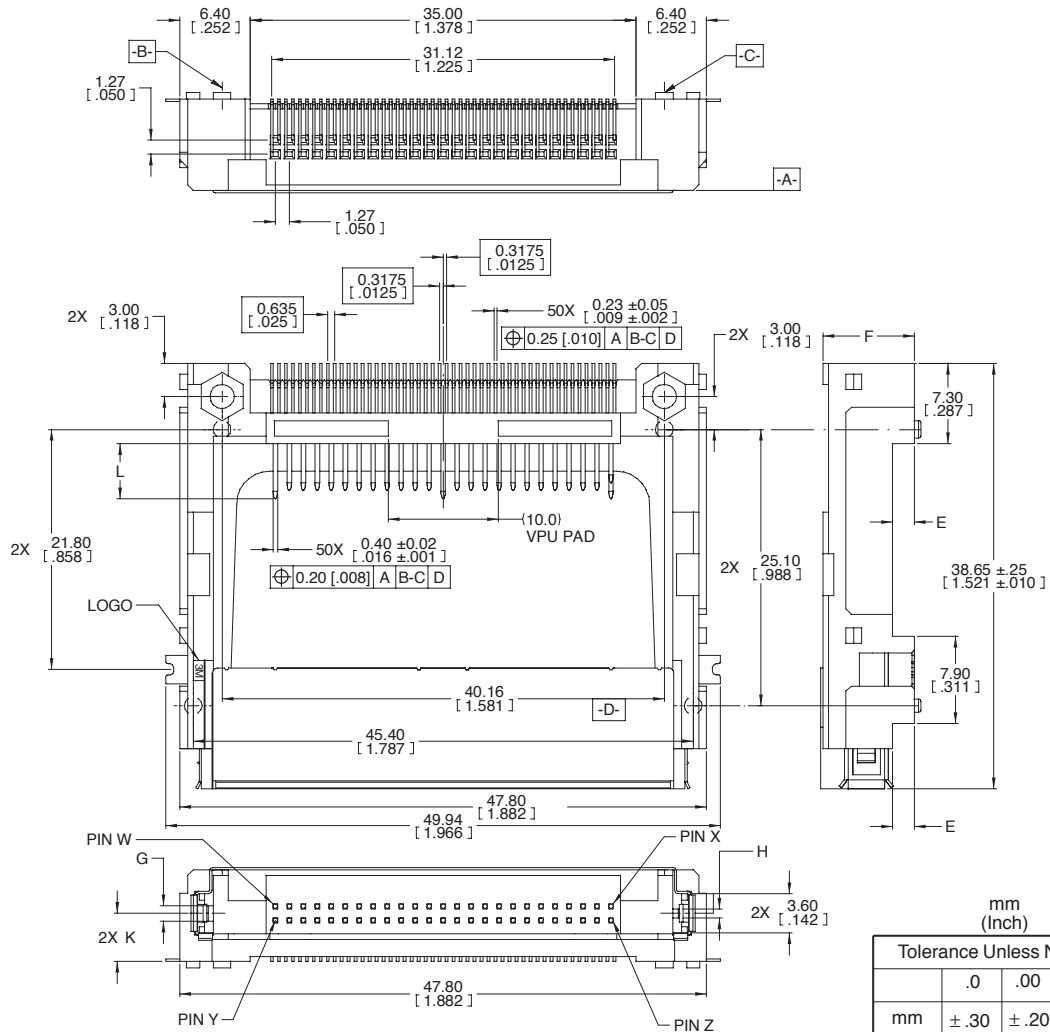
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800-225-5373

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Pin Function	L, Pin length Dim	Pin Position
Detect	3.50 mm [.138 "]	25, 26
General Use	4.25 mm [.167 "]	All other pins
Power	5.00 mm [.197 "]	1, 13, 38, 50



Note: See TS-2154 for applicable ejectors and drawings of assembled ejectors and headers.

Ordering Information

N7E50 - X516XX - XX - XXX (RIA E1 & C1 apply)

M = CF I & II, 31.60 mm, Normal Type, Metal Guide
 N = CF I & II, 31.60 mm, Inverse Type, Metal Guide
 H = CF I & II, 31.60 mm, Normal Type, Metal Guides
 (2.00 mm Standoff Only)

Plating Options:

RA = 0.38 μm [15 μ"] Gold with matte tin tail
 RB = 0.76 μm [30 μ"] Gold with matte tin tail
 EA = 0.38 μm [15 μ"] Gold with Au Flash tail
 EB = 0.76 μm [30 μ"] Gold with Au Flash tail

Board Standoff:

40 = None
 50 = 2.00 mm [.079 "]

Pre-assembled Ejector Option:

Blank = No Ejector
 A = Right Dual Push Ejector (7E50-B516-05)
 C = Left Dual Push Ejector (7E50-B616-05)

*Plating Options:

Blank = Standard White Polystyrene Trays
 WF = Tape and Reel (Automated Assembly)

Note: WF option includes molded suction cap for automated pick and place

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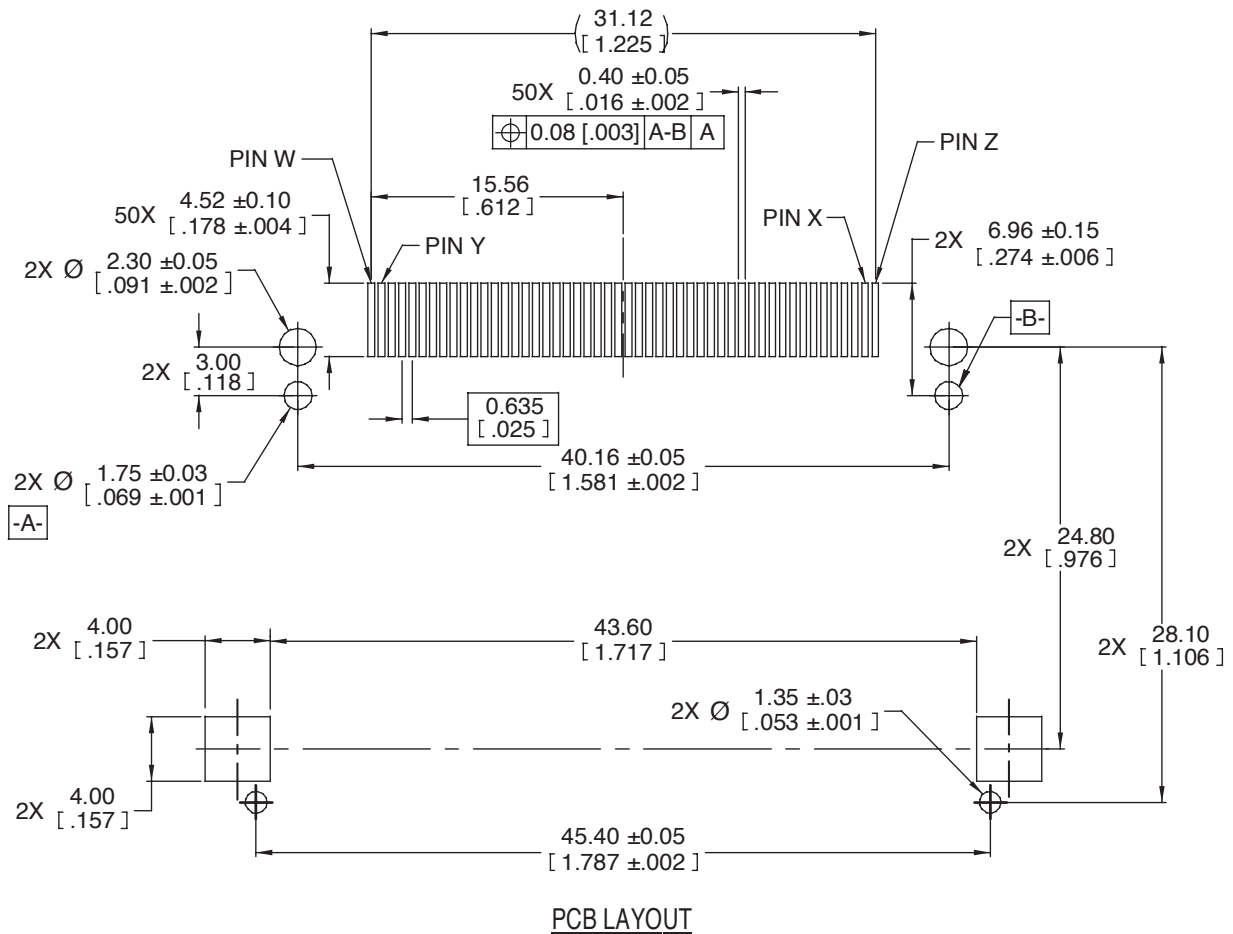
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Part Number	E mm [inch]	F mm [inch]	G mm [inch]	H mm [inch]	K mm [inch]	Pin W	Pin X	Pin Y	Pin Z
N7E50-M516XX-40	0.00 [.000]	6.30 [.248]	1.40 [0.55]	0.80 [.031]	2.35 [.093]	Pin 1	Pin 25	Pin 26	Pin 50
N7E50-M516XX-50	2.00 [.079]	8.30 [.328]	1.40 [.055]	0.80 [.031]	4.35 [.171]	Pin 1	Pin 25	Pin 26	Pin 50
N7E50-N516XX-40	0.00 [.000]	6.30 [.248]	0.80 [.031]	1.40 [.055]	3.95 [.156]	Pin 50	Pin 26	Pin 25	Pin 1
N7E50-N516XX-50	2.00 [.079]	8.30 [.328]	0.80 [.031]	1.40 [.055]	5.95 [.234]	Pin 50	Pin 26	Pin 25	Pin 1
N7E50-H516XX-50	2.00 [.079]	7.90 [.311]	1.40 [.055]	0.80 [.031]	4.15 [.163]	Pin 1	Pin 25	Pin 26	Pin 50



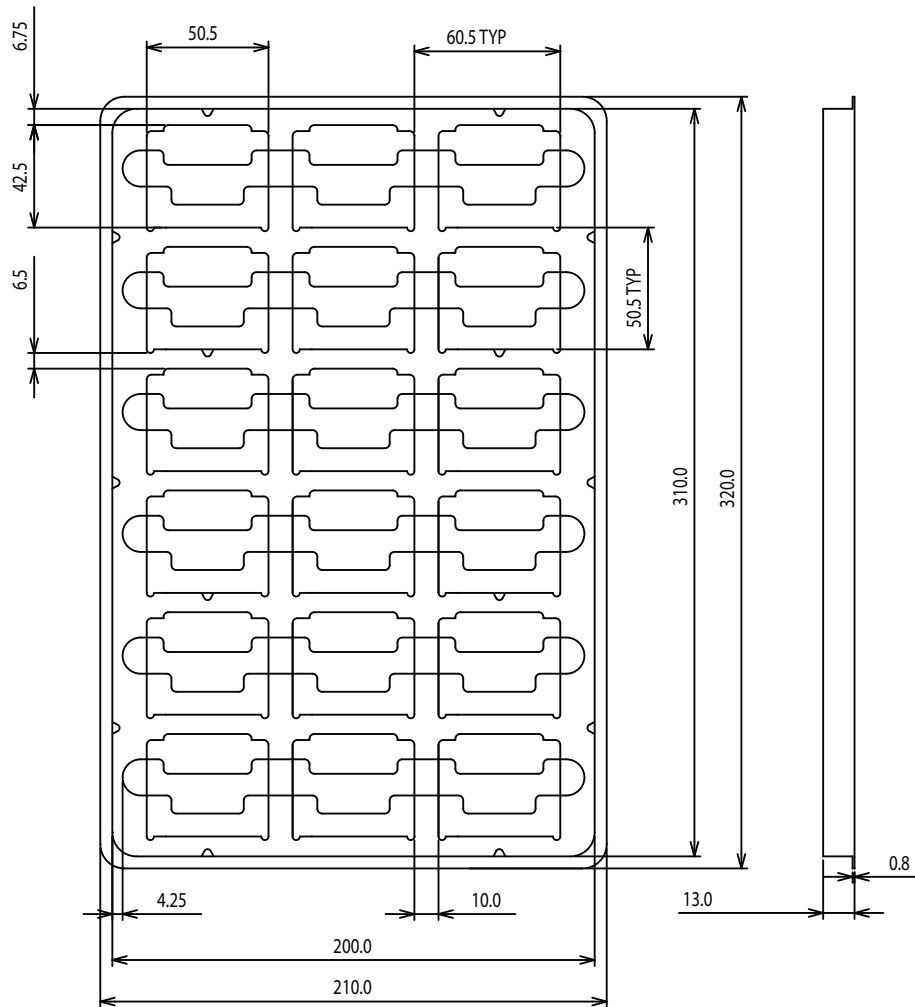
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3M™ CF Card Header

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Standard White Polystyrene Trays (No Eject Attached)



Standard tray notes :

1. Material: PS
2. Packaging quantity:
 - 1 Tray: 18 pcs
 - 1 Carton box: 15 trays per carton (270 pcs total)
3. Carton size: 340 mm (L) by 230 mm (W) by 255 mm (H)
4. Standard tray packaging is not suitable for suction-type pick-and-place Operations. Pick-and-place capable tray packaging is available on request. Contact 3M technical service.
5. For product with pre-assembled ejectors contact 3M technical service for dimensioned drawings.

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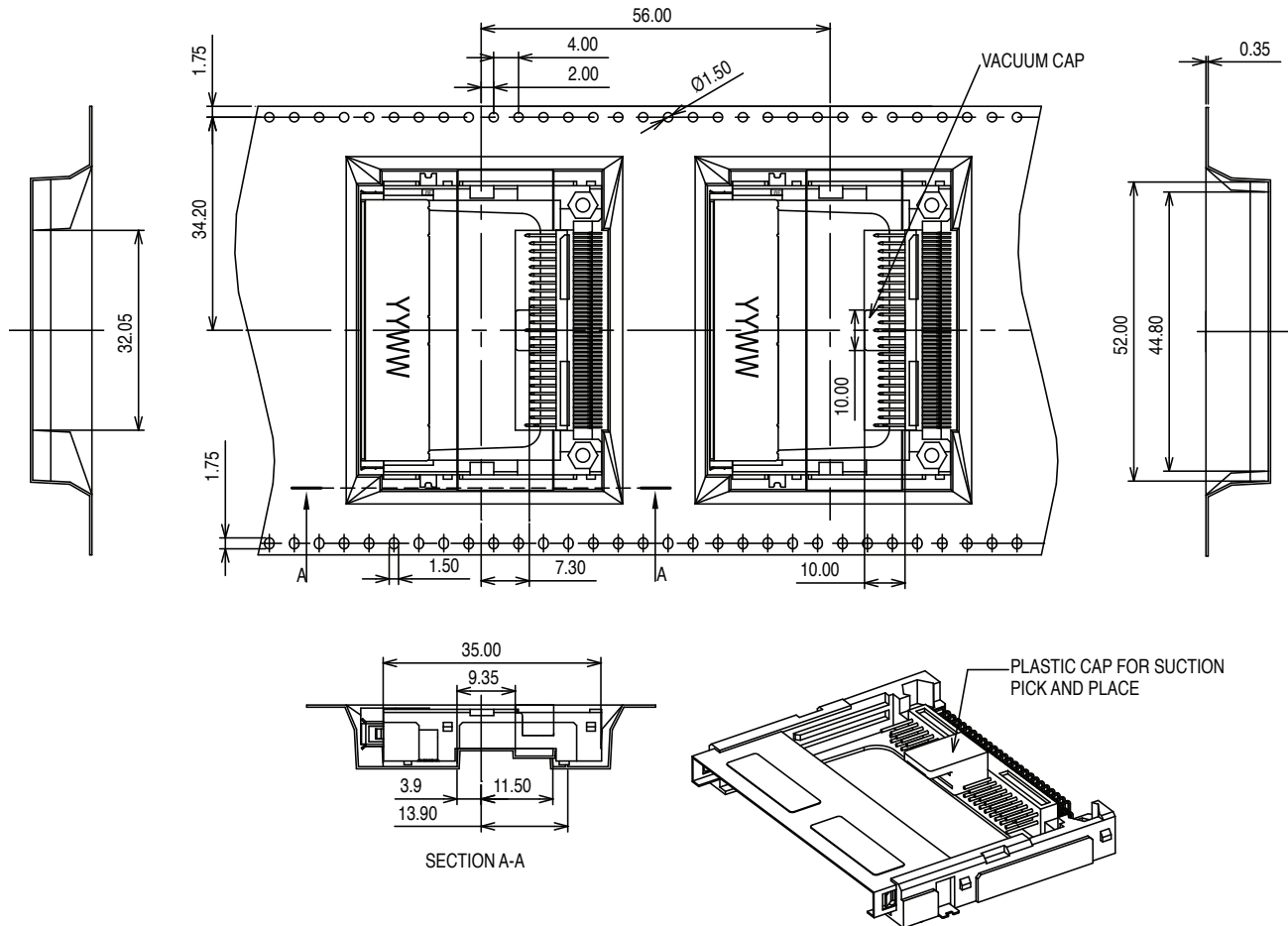
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Tape and Reel for Automated Pick and Place (No Eject Attached)



Notes :

1. Material: PS
2. Packaging quantity
 - 1 Reel: 100 pcs
 - 1 Carton: 4 reels per carton (400 pcs total)
3. Carton size: 725 mm (L) by 375 mm (W) by 320 mm (H)
4. For tape and reel packaging with removable vacuum cap for suction pick and place operations
5. For product with attached ejectors contact 3M technical service for dimensioned drawings.

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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, as amended by EU Commission Decision 2005/717/EC, as amended by EU Court of Justice Decision 2008/C 116/04

This product contains decaBDE in the insulating material in excess of the maximum concentration allowed for finished products subject to EU RoHS that are placed on the EU market after June 30, 2008.

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 (excluding decaBDE); 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 (excluding decaBDE); 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 (Part or Component Name)	有毒有害物质或元素 (Hazardous Substances or Elements)					
	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)	×	○	○	○	○	○
○: 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 (excluding decaBDE); 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.

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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 (Part or Component Name)	有毒有害物质或元素 (Hazardous Substances or Elements)					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
合金(Metal alloy)	×	○	○	○	○	○

○: 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.)

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 90 days 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.**



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