

# 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
- Metal brace provides stability for ejector attachment option
- Guide rail ESD clip contacts board ground pads
- 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
- RoHS\* compliant version (RA or RB plating suffix) available

Date Modified: October 14, 2005

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## Physical

### Insulation

Material: High Temperature Thermoplastic  
Flammability: UL 94V-0  
Color: Beige

### Contact

Material: Copper Alloy

### Plating

Underplating: 2.03  $\mu\text{m}$  [ 80  $\mu\text{m}$  ] Nickel  
Wiping Area: 0.38  $\mu\text{m}$  [ 15  $\mu\text{m}$  ] and 0.76  $\mu\text{m}$  [ 30  $\mu\text{m}$  ] Gold  
Solder Tails: 2.54  $\mu\text{m}$  [ 100  $\mu\text{m}$  ] 90/10 Tin Lead or 3.81 $\mu\text{m}$  [150 $\mu\text{m}$ ] Matte tin (RoHS compliant) (See ordering information)

## Electrical

**Current Rating:** 0.5 A  
**Insulation Resistance:**  $10^3$  M $\Omega$  at 500 VDC  
**Withstanding Voltage:** 500 VAC 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)

\*"RoHS compliant" 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, unless the substance is in an application that is exempt under RoHS: (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 in writing by 3M, this information represents 3M's knowledge and belief based on information provided by third party suppliers to 3M.

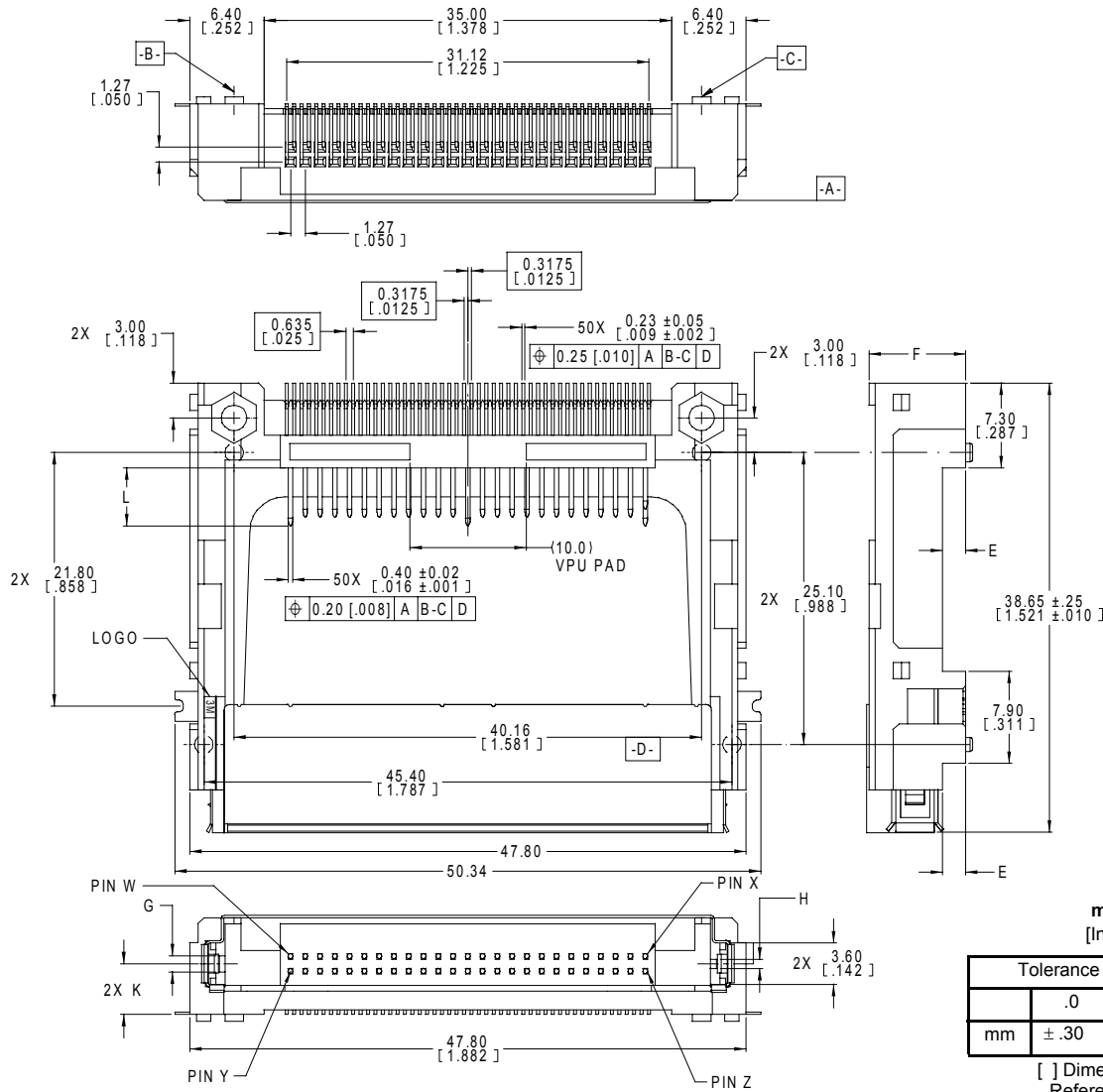
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Pin Function	L, Pin length Dim	Pin Position
Detect	3.50 mm [ .138 " ]	25, 26
General Use	4.25 mm [ .167 " ]	All other pins
Power	5.00 mm [ .199 " ]	1, 13, 38, 50



## Ordering Information

### N7E50 - X516XX - XX - WF

M = CF I & II, 31.60 mm, Normal Type, Metal Guide  
 N = CF I & II, 31.60 mm, Inverse Type, Metal Guide

**Plating Options:**

TH = 0.38 μm [ 15 μ" ] Gold with Sn-Pb tail  
 TC = 0.76 μm [ 30 μ" ] Gold with Sn-Pb tail  
 RA = 0.38 μm [ 15 μ" ] Gold with Matte tin tail (RoHS compliant)  
 RB = 0.76 μm [ 30 μ" ] Gold with matte tin tail (RoHS compliant)

**Board Standoff:**

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

**Packaging Options:**  
 Blank = Trays  
 WF = Tape and Reel

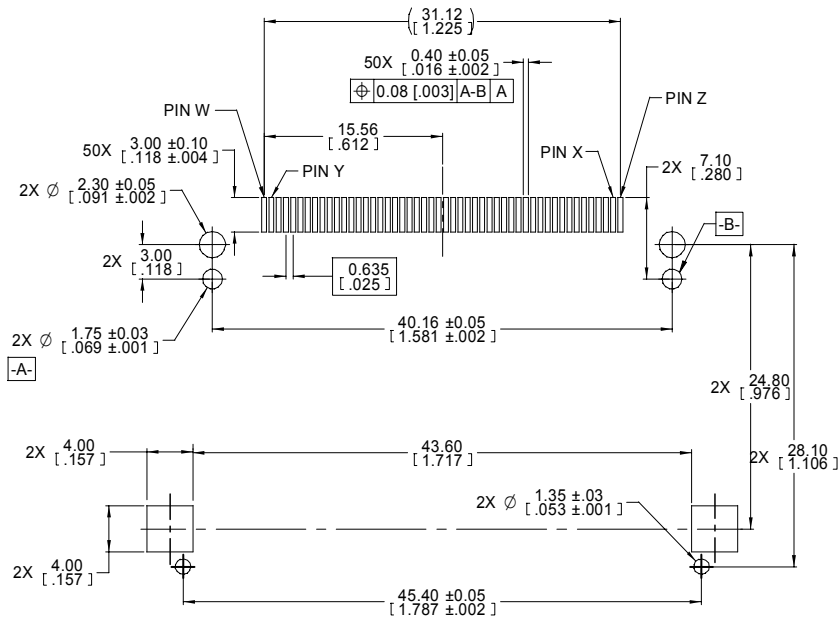
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# 3M™ CF Card Header

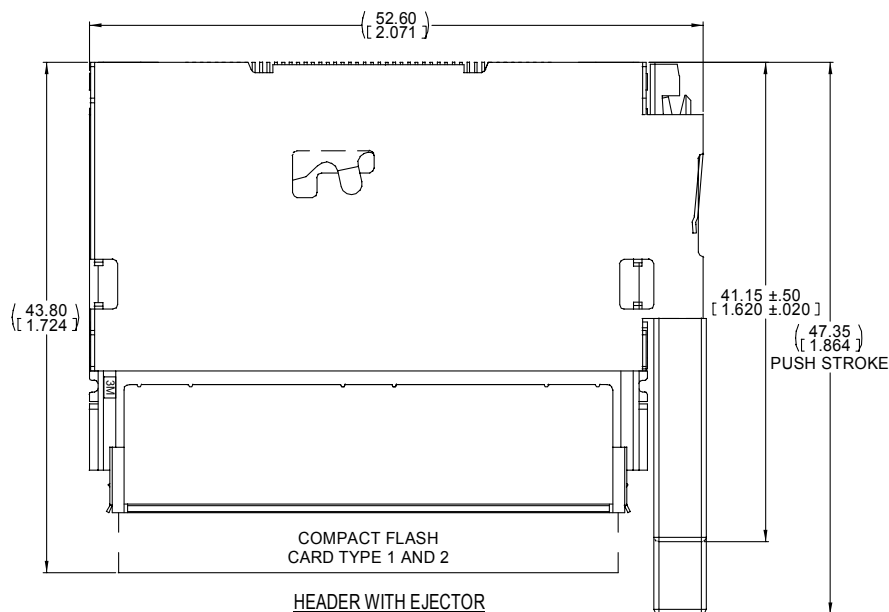
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Part Number	E mm [ inch ]	F mm [ inch ]	G mm [ inch ]	H mm [ inch ]	K mm [ inch ]	Pin W	Pin X	Pin Y	Pin Z
N7E50-M516XX-40	0.00 [ .000 ]	6.30 [ .248 ]	1.40 [ 0.55 ]	0.80 [ .031 ]	2.35 [ .093 ]	Pin 1	Pin 25	Pin 26	Pin 50
N7E50-M516XX-50	2.00 [ .079 ]	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



PCB LAYOUT



**HEADER WITH EJECTOR**  
 Ejector Button Assembly 3M Part No. 7E50-B316-04  
 (Order Separately)  
 Button on right side for Normal Header  
 Button on left side for Inverse Header  
 Ejector is RoHS compliant\*

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Minimum 10%  
Post-Consumer Fiber

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