

# 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
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information (RIA E1 & C1 apply)

Date Modified: August 16, 2010

TS-2083-G  
Sheet 1 of 5

## Physical

### Insulation:

Material: High Temperature Thermoplastic

Flammability: UL 94V-0

Color: Beige

### Contact:

Material: Copper Alloy

### Plating:

Underplating: 2.03  $\mu\text{m}$  [ 80  $\mu''$  ] Nickel

Wiping Area: 0.38  $\mu\text{m}$  [ 15  $\mu''$  ] or 0.76  $\mu\text{m}$  [ 30  $\mu''$  ] Gold

Solder Tails: 3.81  $\mu\text{m}$  [ 150  $\mu''$  ] 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.

**3M**  
Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnector.com>

3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

# 3M™ CF Card Header

CompactFlash™ Type II, Long Guides, Surface Mount

7E50 Series

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

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)

\*Packaging Options:  
 Blank = Standard White Polystyrene Trays  
 WF = Tape and Reel (Automated Assembly)  
 Note: WF option includes molded suction cap for automated pick and place

TS-2083-G  
 Sheet 2 of 5

# 3M™ CF Card Header

CompactFlash™ Type II, Long Guides, Surface Mount

7E50 Series

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



TS-2083-G  
Sheet 3 of 5

# 3M™ CF Card Header

CompactFlash™ Type II, Long Guides, Surface Mount

7E50 Series

## 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.

TS-2083-G  
Sheet 4 of 5

**3M**  
Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnector.com>

3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

# 3M™ CF Card Header

CompactFlash™ Type II, Long Guides, Surface Mount

7E50 Series

## 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.

TS-2083-G  
Sheet 5 of 5

**3M**  
Electronic Solutions Division  
Interconnect Solutions  
<http://www.3Mconnector.com>

3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

### **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 one (1) year 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.**



### **3M Electronics Solutions Division**

6801 River Place Blvd.  
Austin, TX 78726-9000  
U.S.A.  
1-800-225-5373  
[www.3Mconnector.com](http://www.3Mconnector.com)

Please recycle. Printed in USA.  
© 3M 2010. All rights reserved.  
RIA-2217B-E

3M is a trademark of 3M Company.