

# STANDARD HIGH SPEED FLEX DATA LINKS

## SPECIFICATIONS

For complete specifications see [www.samtec.com?HFEM2-DP](http://www.samtec.com?HFEM2-DP) or [www.samtec.com?HFEM2-SE](http://www.samtec.com?HFEM2-SE)

**Terminal:**

QTE or QTE-DP Series



**Socket:**

QSE or QSE-DP Series

**Plating:**

Au over 50µ" (1,27µm) Ni

**Cable:**

HFEM2 (2 Layer)  
1/2 oz. rolled annealed copper

**Adhesive:**

FR (DuPont)

**Stiffener:**

FR-4 glass epoxy

**Flammability Rating:**

UL 94 V0

**Operating Temp Range:**

-55°C to +105°C

**Unmating Force (-RT1 option):**

-RT1 option increases unmating force up to 50%

**RoHS Compliant:**

Yes

-DP Mates with:  
QTE-DP, QSE-DP

-SE Mates with:  
QTE, QSE

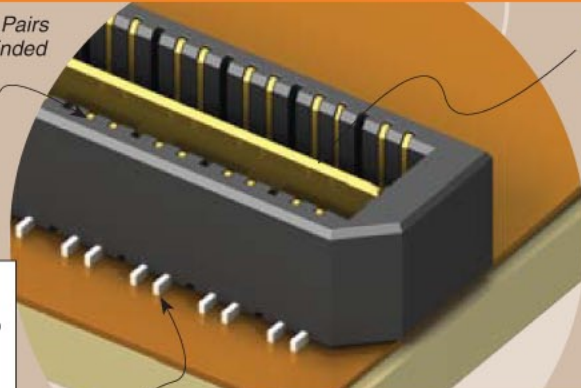


[www.samtec.com/solutionator](http://www.samtec.com/solutionator)

Design, build and order your own custom data link online: any pin count, any length, any orientation and with your unique signal/ground assignments, all with standard product lead time and pricing.

Differential Pairs or Single-Ended

Metal Ground Plane



(0,80mm) .0315" pitch

Cable Length	HFEM2 Rated @ 7dB Insertion Loss	
	-DP	-SE
5" (127mm)	5.96 GHz / 11.92 Gbps	4.7 GHz / 9.4 Gbps
10" (254mm)	3.98 GHz / 7.96 Gbps	3.66 GHz / 7.32 Gbps

Performance data for other cable lengths and complete test data available at [www.samtec.com?HFEM2-DP](http://www.samtec.com?HFEM2-DP), [www.samtec.com?HFEM2-SE](http://www.samtec.com?HFEM2-SE) or contact [sig@samtec.com](mailto:sig@samtec.com)

**Protocols Supported**

- SAS
- SATA
- Fibre Channel
- Ethernet
- PCIe®
- Infiniband

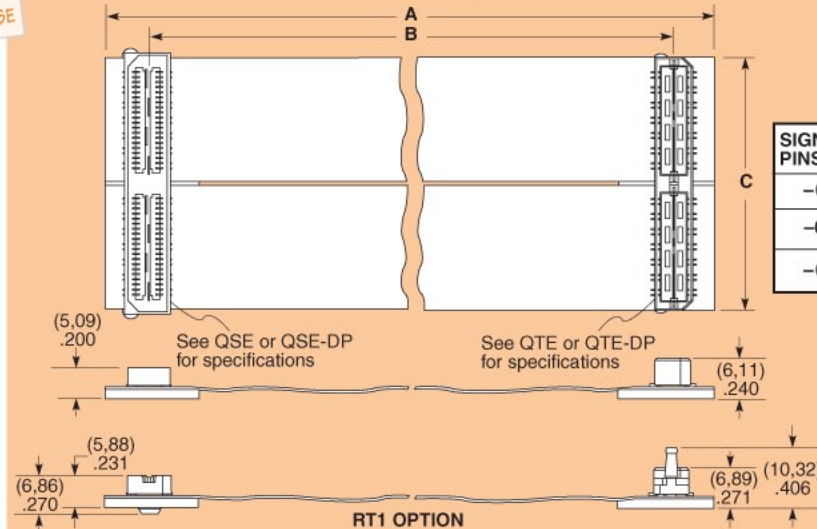
Download test report at [www.samtec.com?HFEM2-DP](http://www.samtec.com?HFEM2-DP) or [www.samtec.com?HFEM2-SE](http://www.samtec.com?HFEM2-SE)

TYPE	SIGNAL PINS	T	OVERALL LENGTH	SIGNAL ROUTING	OTHER OPTION
HFEM2 = 2 layer flex	-014, -028, -042 = Number of Pairs (-DP) -020, -040, -060 = Pins per row (-SE) (Total number of Signals)		-03.00 = (76,20mm) 3.00" -05.00 = (127,0mm) 5.00" -10.00 = (254,0mm) 10.00"	-DP = Differential Pairs -SE = Single-Ended	Leave blank for no Mounting Holes or Retention Pins -RT1 = Retention Option -MH = Mounting Holes (3,18mm) .125" DIA

**-SE ROUTING**

Product has some lines dedicated to ground. For signal/ground assignments see signal routing information on this page or the assembly print at the web address above.

**Note:** Some sizes, styles and options are non-standard, non-returnable.



SIGNAL PAIRS/PINS PER ROW	C	C (With -RT1)	C (With -MH)
-014/-020	(19,50) .768	(33,98) 1.338	(27,62) 1.087
-028/-040	(39,52) 1.556	(53,99) 2.126	(47,64) 1.876
-042/-060	(59,54) 2.344	(74,00) 2.914	(67,65) 2.663

OVERALL LENGTH	A	B
-03.00	(76,20) 3.00	(64,52) 2.54
-05.00	(127,00) 5.00	(115,32) 4.54
-10.00	(254,00) 10.00	(242,32) 9.54

Due to technical progress, all designs, specifications and components are subject to change without notice.

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