samtec

TIGER EYE™ SYSTEM

TFC-120-22-L-D-A

TFC-110-12-L-D-A

TFC-145-02-L-D-A

(1.27 mm) .050"

TFC SERIES

COST-EFFECTIVE RELIABLE HEADER

Shrouded body for blind mating

(1.27 mm x 1.27 mm) .050" x .050" micro pitch

Choice of eight body heights

Surface Mount or Through-hole

Alignment pin option available

SPECIFICATIONS

Board Mates:
SFC

Cable Mates:
SFSD, SFSDT

For complete specifications and recommended PCB layouts see www.samtec.com?TFC

Insulator Material:
Black Liquid Crystal Polymer
Terminal Material:
Phosphor Bronze
Plating:
Au or Sn over
50 µ" (1.27 µm) Ni
Current Rating:
3.1 A per pin
(2 pins powered)
Voltage Rating:
350 VAC mated with SFC
Operating Temp Range:
-55 °C to +125 °C
RoHS Compliant:
Yes

PROCESSING

Lead-Free Solderable:
Yes
SMT Lead Coplanarity:
(0.10 mm) .004" max (03-25)
(0.15 mm) .006" max (30-50)*
*(.004" stencil solution
may be available; contact
IPG@samtec.com)

RECOGNITIONS

For complete scope of recognitions see www.samtec.com/quality

UL FILE NO. E111594

ALSO AVAILABLE
(MOQ Required)

• Other sizes

MATED HEIGHTS

LEAD STYLE		MATED HEIGHT*
TFC	SFC	
– 01	–T1	(5.97) .235
– 11		(7.75) .305
– 21		(9.53) .375
– 31		(11.43) .450
– 02	–T2	(6.35) .250
– 12		(8.13) .320
– 22		(9.91) .390
– 32		(11.81) .465

*Processing conditions will affect mated height.

HIGH-SPEED CHANNEL PERFORMANCE

Rating based on Samtec reference channel. For full SI performance data visit Samtec.com or contact SIG@samtec.com

8 Gbps

Part Number Builder

TFC	1	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	D	OPTION

03, 04, 06, 08
(Lead Style –01 & –02 only)

05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50
(Standard sizes)

–X1
= Through-hole

–X2
= Surface Mount

–F
= Gold flash on post, Matte Tin on tail

–L
= 15 µ" (0.38 µm) Gold on post, Matte Tin on tail

–RA
= Right-angle (–01 only)

–A
= Alignment Pin

–LC
= Locking Clip (Manual Placement required) (not available with –RA)

–K
= (6.75 mm) .266" DIA Polyimide film Pick & Place Pad
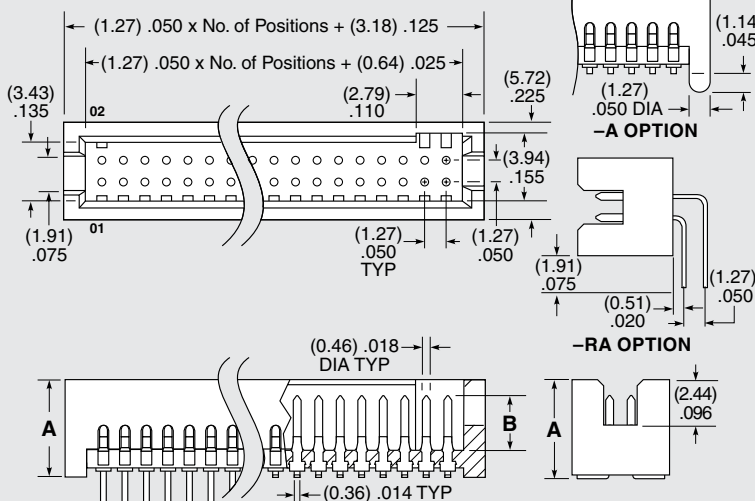
–P
= Plastic Pick & Place Pad (5 positions min.)

–TR
= Tape & Reel (–X2 only)

–FR
= Full Reel Tape & Reel (Must order max. quantities per reel. Contact Samtec for parts per reel) (–X2 only)

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

TH LEAD STYLE	A	B
–01	(5.59) .220	(3.38) .133
–11	(7.37) .290	(3.30) .130
–21	(9.14) .360	
–31	(11.05) .435	

SMT LEAD STYLE	A	B
–02	(5.72) .225	(3.38) .133
–12	(7.49) .295	(3.30) .130
–22	(9.27) .365	
–32	(11.18) .440	

(1.27) .050 x No. of Positions + (3.18) .125

(1.27) .050 x No. of Positions + (0.64) .025

(3.43) .135

(2.79) .110

(5.72) .225

02

01

(3.94) .155

(1.91) .075

(1.27) .050 TYP

(1.27) .050

(1.14) .045

(1.27) .050 DIA

–A OPTION

(1.91) .075

(0.51) .020

(1.27) .050

–RA OPTION

(0.46) .018 DIA TYP

A

B

(0.36) .014 TYP

A

B

(2.44) .096

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

All parts within this catalog are built to Samtec's specifications.
Customer specific requirements must be approved by Samtec and identified in a Samtec customer-specific drawing to apply.