









(1.27 mm) .050"

# T & THROUGH-HOLE HEADER

### **SPECIFICATIONS**

For complete specifications and recommended PCB layouts see www.samtec.com?TFM or www.samtec.com?TFML

Insulator Material: Black Liquid Crystal Polymer
Terminal Material: Phosphor Bronze

Plating: Au or Sn over 50 μ" (1.27 μm) Ni Current Rating (TFM/SFM): 3.2 A per pin

(2 pins powered) Voltage Rating: 250 VAC mated with SFM Operating Temp Range: -55 °C to +125 °C RoHS Compliant:

# **PROCESSING**

Lead-Free Solderable: SMT Lead Coplanarity: (0.10 mm) .004" max (05-25) (0.15 mm) .006" max (30-50)\* (.004" sténcil solution may be available; contact IPG@samtec.com)

#### RECOGNITIONS

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



# **MATED HEIGHTS**

LEAD STYLE		MATED
TFM	SFM	HEIGHT*
- 02	-02	(6.35) .250
- 12		(8.13) .320
- 22		(9.91) .390
- 32		(11.81) .465
LEAD STYLE		MATED
TFM	SFM	HEIGHT*
-01		(5.97) .235
-03		(5.97) .235
		(5.57) .205
-11		(7.75) .305
-11 -13	-01	` ′
	-01	(7.75) .305
-13	-01	(7.75) .305 (7.75) .305
-13 -21	-01	(7.75) .305 (7.75) .305 (9.53) .375

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

affect mated height.



SFM, SFMC

**TFM Cable Mates:** 

**TFML Board Mates:** 

**TFM-DH Board Mates:** 

SFM (-DH), SFMC

TYPE

STRIP

 $\mathsf{TFM}$ 

 $\mathsf{TFML}$ = Locking (-01 & -02

lead style only)

Standard

**TFM-DH Cable Mates:** SFSDX (-S, -D, -SR, -DR)

TENDED LIFE

Shrouded body for blind mating (1.27 mm x 1.27 mm) .050" x .050" micro pitch Surface mount or through-hole tails

**HIGH-SPEED CHANNEL PERFORMANCE** 

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

**NO. PINS** 

**PER ROW** 

03, 04, 06, 08 (TFM -01 & -02 only)

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

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

TFM-115-02-L-S



TFM to SFM-SH SHOWN

**LEAD STYLE** 

Specify LEAD STÝLE from chart

= 15 µ" (0.38 µm) Gold on post, Matte Tin on tail (Call Samtec for E.L.P.™ plating option)

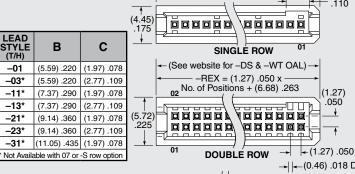
**PLATING** 

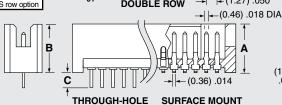
**OPTION** 

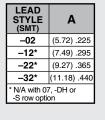
# OTHER SOLUTIONS

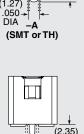
(1.27)

Lower cost plating options. See TFC Series.





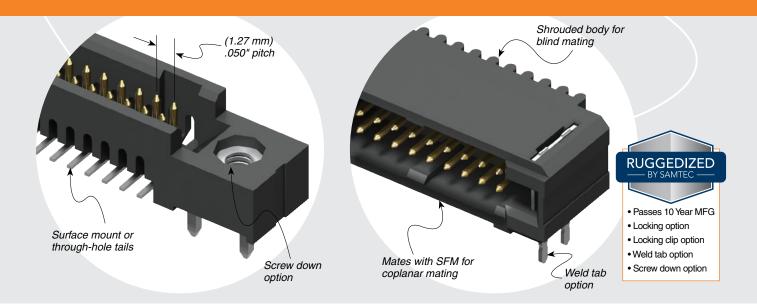




(1.14)

.045

.055 (2.35)(SMT or TH) (-01 & -02 ONLY)



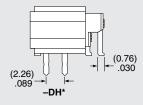
# **ROW** OPTION

# –S = Single Row (TFM only)

### –D = Double Row

# -DH\*

= Double Horizontal (TFM lead style -02 only) (05 thru 50 positions only) (-TR option only available)





-DS (-D, -01 & -02 ONLY)

# OPTION

# Specify only -RA, -RE1 or -RE2

# -RA

= Right-angle (Lead style -01 only)

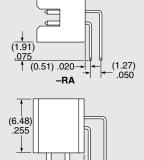
# -RE1

= Right-angle Elevated for (1.58 mm) .062" PCB (Requires TFM lead style -01, -D row and -WT)

### –RE2

= Right-angle Elevated for (2.36 mm) .093" PCB (Requires TFM lead style –01, –D row and –WT)

**Note:** The recommended -REX PCB board layout is different from the -RA. Contact IPG@samtec.com before designing your board for specifications.



(1.91)(0.51).020-.075 -RE1 & -RE2

Specify only –A, –LC, –DS or –WT Not available with –RA, –RE1 and –RE2 unless otherwise noted.

# -A

= Alignment Pin

#### -LC

= Locking Clip (Manual Placement required)

# -DS

-DS

= Dual Screw Down for
(1.60 mm) .062" PCB
(05, 07, 10, 15, 20, 25, 30,
35, 40 positions only)
(TFM lead styles -01 and -02 only)
(Requires -D row option)
(Mates with SFM-DS option and
SFSD/SFSDT -SS and -DS option only)
(Not available with -A, -LC,
-WT, -K, -P, -TR)

# -WT

= Weld Tab (TFM lead styles -01 and -02 only) (Required callout for -RE1 & -RE2) (Mates to SFSS/SFSD -SR and -DR option only) (05, 07, 10, 15, 20, 25, 30, 35, 40, 45, 50 positions only)

#### Note:

Weld tab is standard on -DH option. No need to specify -WT.

SMT lead styles only Specify only –K or –P **–K** 

= Polyimide Film Pick & Place Pad

= Plastic Pick & Place Pad (5 positions minimum) (Not available with 5 position with -WT)

> Specify -TR last -TR

= Tape & Reel (Not available with –DS)

# **ALSO AVAILABLE** (MOQ Required)

- · Solder nail option
- Other sizes
- · Other platings

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

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# Samtec:

TFM-145-02-S-D-LC-P TFM-115-22-L-D-A-P TFM-110-32-L-D-A-P TFM-120-01-S-D-LC TFM-110-32-L-D-LC TFM-115-32-S-D-A-K TFM-145-32-S-D-LC-P TFM-130-32-S-D-LC-P TFM-110-02-SM-D-A-K TFM-115-32-L-D-A-P TFM-145-31-S-D-A TFM-130-32-S-D TFM-110-22-L-D-A-P TFM-105-02-L-S TFM-150-11-S-D-A TFM-150-12-S-D-LC-TR TFM-120-02-S-D-LC-P TFM-115-02-S-D-LC-P TFML-150-01-S-D TFM-130-21-S-D TFM-120-02-L-D-WT-P-TR TFM-107-01-S-D-LC TFM-135-32-S-D-A-P-TR TFM-125-12-SM-D-LC TFM-107-01-L-S-LC TFM-110-02-L-D-WT-P-TR TFM-120-22-S-D-P-TR TFM-120-32-F-D-LC TFM-125-02-F-D-P-TR TFM-125-02-S-D-K TFM-125-12-S-D-K TFM-125-12-S-D-TR TFM-125-22-S-D-LC-P TFM-125-32-S-D-LC-K TFM-130-12-S-D-LC-P TFM-130-32-S-D-LC-P-TR TFM-135-01-F-D TFM-135-02-S-S-A TFM-135-22-F-D-A TFM-106-01-S-S TFM-109-02-S-D-TR TFM-110-02-S-D-LC-K-TR TFM-110-02-S-D-LC-P TFM-110-12-S-D-LC-K TFM-110-22-S-D-K-TR TFM-110-12-S-D-P-TR TFM-110-22-S-D-P TFM-110-32-S-D-LC-K TFM-113-02-S-D-A TFM-114-02-S-D-A TFM-115-02-S-D-TR TFM-115-12-F-D-K-TR TFM-115-12-S-D-P TFM-115-32-S-D-LC-P-TR TFM-120-22-S-D-LC-P-TR TFM-120-32-S-D-P-TR TFM-125-01-S-S TFM-125-02-S-D-LC-P TFM-125-11-S-D-A TFM-125-31-S-D-LC TFM-125-32-F-D TFM-130-02-F-D-A-P TFM-130-02-S-D-P TFM-130-02-S-D-TR TFM-130-12-S-D-A-K-TR TFM-130-12-S-D-P TFM-140-02-S-D-A-P TFM-140-12-S-D-LC-TR TFM-140-21-S-D TFM-140-31-S-D-LC TFM-145-01-S-D-LC TFM-114-02-S-S TFM-114-02-S-S-LC TFM-115-01-F-D TFM-115-02-S-D-K-TR TFM-115-02-S-D-LC-K TFM-115-12-S-D TFM-115-22-S-D-A-K-TR TFM-118-02-S-D-LC TFM-120-01-F-D TFM-120-01-F-D-RA TFM-120-12-F-D TFM-120-12-F-D-P TFM-120-21-S-D-A TFM-120-31-S-D TFM-120-31-S-D-LC-P TFM-125-02-S-D-LC-P-TR TFM-125-02-S-D-TR TFM-125-12-S-D-LC-P TFM-125-12-S-D-LC-TR TFM-125-22-S-D-P TFM-125-32-S-D-LC-TR TFM-130-01-F-D TFM-130-01-F-D-RA TFM-130-02-S-D-K TFM-130-12-S-D-A-P TFM-130-12-S-D-A-TR TFM-130-12-S-D-LC TFM-145-11-S-D-LC TFM-130-22-S-D