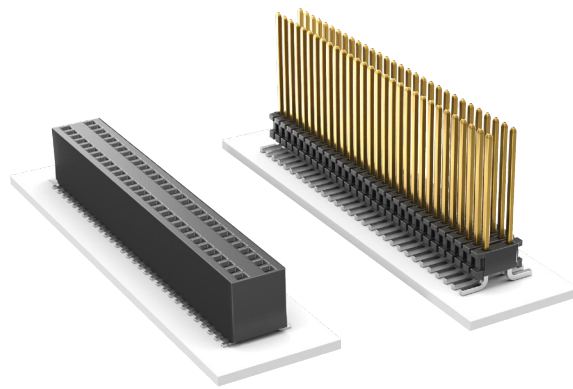


# SMT MICRO HEADER & SOCKET

(1.27 mm) .050" PITCH • FTR/RSM SERIES



**FTR**  
Mates:  
RSM, SMS, SLM

**RSM**  
Mates:  
FTR, HTMS, HDWM,  
DWM, TML, ZML, TMS

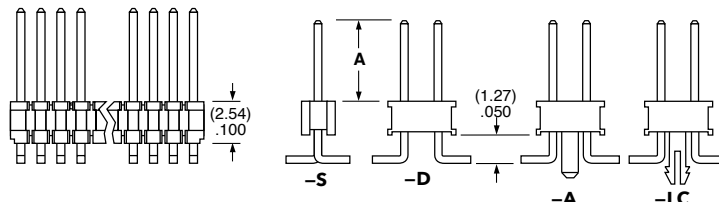
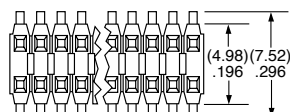
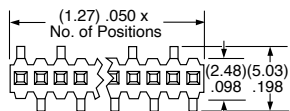
## SPECIFICATIONS

**Insulator Material:**  
Black Liquid Crystal Polymer  
**Contact Material:**  
RSM: Phosphor Bronze  
**Terminal Material:**  
FTR: Phosphor Bronze  
**Plating:**  
Au or Sn over  
50  $\mu$ " (1.27  $\mu$ m) Ni  
**Operating Temp Range:**  
FTR: -55 °C to +105 °C with Tin;  
FTR: -55 °C to +125 °C with Gold  
RSM: -55 °C to +125 °C  
**Current Rating (FTR/RSM):**  
3.8 A per pin  
(2 pins powered)  
**Voltage Rating:**  
290 VAC/410 VDC  
**Lead Size Accepted:**  
RSM: (0.46 mm) .018" SQ  
**Insertion Depth:**  
RSM: Top Entry =  
(2.64 mm) .104" to (5.84 mm) .230"  
with (0.38 mm) .015" wipe, or  
pass-through.  
RSM: Bottom Entry =  
(5.49 mm) .216" minimum  
(Add board thickness for  
correct post OAL)

| FTR | 1 | NO. PINS PER ROW | LEAD STYLE                    | PLATING OPTION                                                                                                                                                                                            | ROW OPTION                                   | OPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----|---|------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |   | 02 thru 40       | Specify LEAD STYLE from chart | -F<br>= Gold flash on contact, Matte Tin on tail<br><br>-L<br>= 10 $\mu$ " (0.25 $\mu$ m)<br>Gold on post, Matte Tin on tail<br><br>-G<br>= 10 $\mu$ " (0.25 $\mu$ m)<br>Gold on post, Gold flash on tail | -S<br>= Single Row<br><br>-D<br>= Double Row | -XX<br>= Polarized<br><br>-A<br>= Alignment Pin (5 positions min. for -D) (Metal or plastic at Samtec discretion) (Not available with -LC)<br><br>-LC<br>= Locking Clip (6 positions min. for -D) (Not available with -A) (Manual placement required)<br><br>-P<br>= Plastic Pick & Place Pad (5 positions min. for -D) (8 positions min. for -S)<br><br>-TR<br>= Tape & Reel (4 positions min. for -S)<br><br>-FR<br>= Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) (4 positions min. for -S) |

| LEAD STYLE | A            |
|------------|--------------|
| -01        | (5.84) .230  |
| -02        | (2.54) .100  |
| -03        | (3.18) .125  |
| -51        | (4.83) .190  |
| -52        | (5.21) .205  |
| -53        | (7.24) .285  |
| -54        | (8.51) .335  |
| -55        | (9.91) .390  |
| -56        | (10.29) .405 |
| -57        | (10.92) .430 |



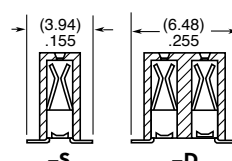
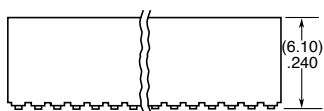
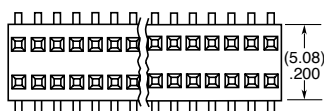
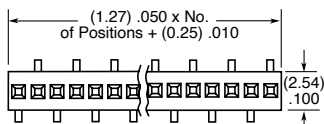
## PROCESSING

**Lead-Free Solderable:**  
Yes  
**SMT Lead Coplanarity:**  
RSM: (0.10 mm) .004" max  
FTR: (0.10 mm) .004" max (02-20)  
FTR: (0.15 mm) .006" max (21-40)\*  
\*(.004" stencil solution may be available; contact ipg@samtec.com)

| RSM | 1 | NO. PINS PER ROW | 02 | PLATING OPTION                                                                                                                  | ROW OPTION                                   | OPTION                                                                                                                                                                                                                                                                                                                                                            |
|-----|---|------------------|----|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |   | 02 thru 36       |    | -F<br>= Gold flash on contact, Matte Tin on tail<br><br>-L<br>= 10 $\mu$ " (0.25 $\mu$ m)<br>Gold on contact, Matte Tin on tail | -S<br>= Single Row<br><br>-D<br>= Double Row | -K<br>= (6.25 mm) .246" DIA Polyimide film Pick & Place Pad (5 positions minimum for -D) (7 positions minimum for -S)<br><br>-P<br>= Plastic Pick & Place Pad (5 positions minimum for -D) (6 positions minimum for -S)<br><br>-TR<br>= Tape & Reel<br><br>-FR<br>= Full Reel Tape & Reel (must order max. quantity per reel; contact Samtec for quantity breaks) |

| LEAD STYLE | A            |
|------------|--------------|
| -01        | (5.84) .230  |
| -02        | (2.54) .100  |
| -03        | (3.18) .125  |
| -51        | (4.83) .190  |
| -52        | (5.21) .205  |
| -53        | (7.24) .285  |
| -54        | (8.51) .335  |
| -55        | (9.91) .390  |
| -56        | (10.29) .405 |
| -57        | (10.92) .430 |



**ALSO AVAILABLE**  
Contact Samtec

Other platings  
Locking clips

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

samtec.com?FTR or samtec.com?RSM

F-224 (Rev 25APR25)

Unless otherwise approved in writing by Samtec, all parts and components are designed and built according to Samtec's specifications which are subject to change without notice.