

NANONICS (.025/.0125"Pitch) CONNECTORS

For Flex Circuits, Ribbon, Flat Cable

Nanonics Corporation offers a wide range of ultra-miniature connectors for flex and ribbon cable.

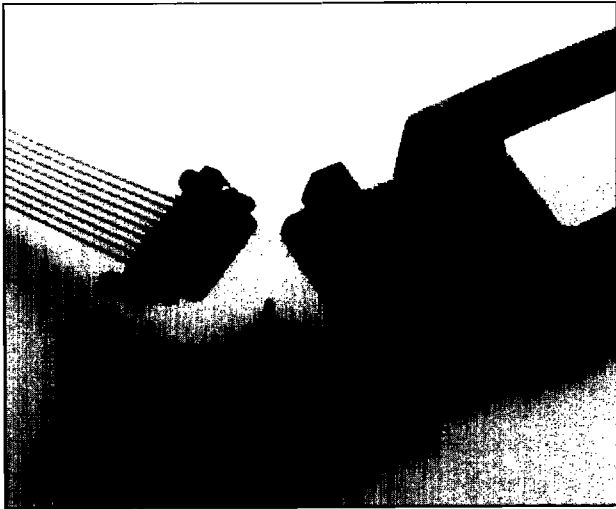


Fig.1 Ribbon and Flex Terminations to Duallobe Plug

Designed for mass crimp termination to .025" and .0125" pitch flat/ribbon cable and flex circuits, Connectors feature MIL class reliability in severe environments, and dense packaging capability; (1/4 of microminiature size) and reduced weight - 0.5 grams avg.). The 2-row Duallobe provides an effective termination pitch of .0125".

Applications include:

- Deep space probe vehicles
- Avionics and Missiles
- Oil well drilling tools
- Military Electronics
- Industrial Electronics
- Medical Electronics

Available as strips or shrouded DUALLOBE[®], connectors feature one or two rows, vertical, horizontal, surface mount, thru-hole, and panel mount options.

Proprietary crimp technology eliminates solder terminations and related problems.

Mass Crimps exceed requirements of MIL-C-39029 and terminate any material, any shape, any finish, <=28AWG.

Connectors meet DSCC¹ specifications 94031-94049 for Nanominiature connectors, and the performance requirements of MIL-C-83513.

The 4 amp contact system features a one-piece, seamless, spring socket and pin design enhancing environmental performance.

New thresholds of performance have been established via the GOLDBORE[™] contact and proprietary crimp terminations. i.e.;

- Low R, .003-.008 ohms
- Hi Current; 4 Amps Cont.
- MIL quality mass crimp
- **Seamless** contacts
- MIL spec performance
- DSCC¹ spec qualified
- Increased voltage limits via insulator design
- Low engaging forces

Stocked sizes: 9 15 25 37 51 65.

Standard sizes: 5-65 positions.

For additional information:

NANONICS[®]
CORPORATION

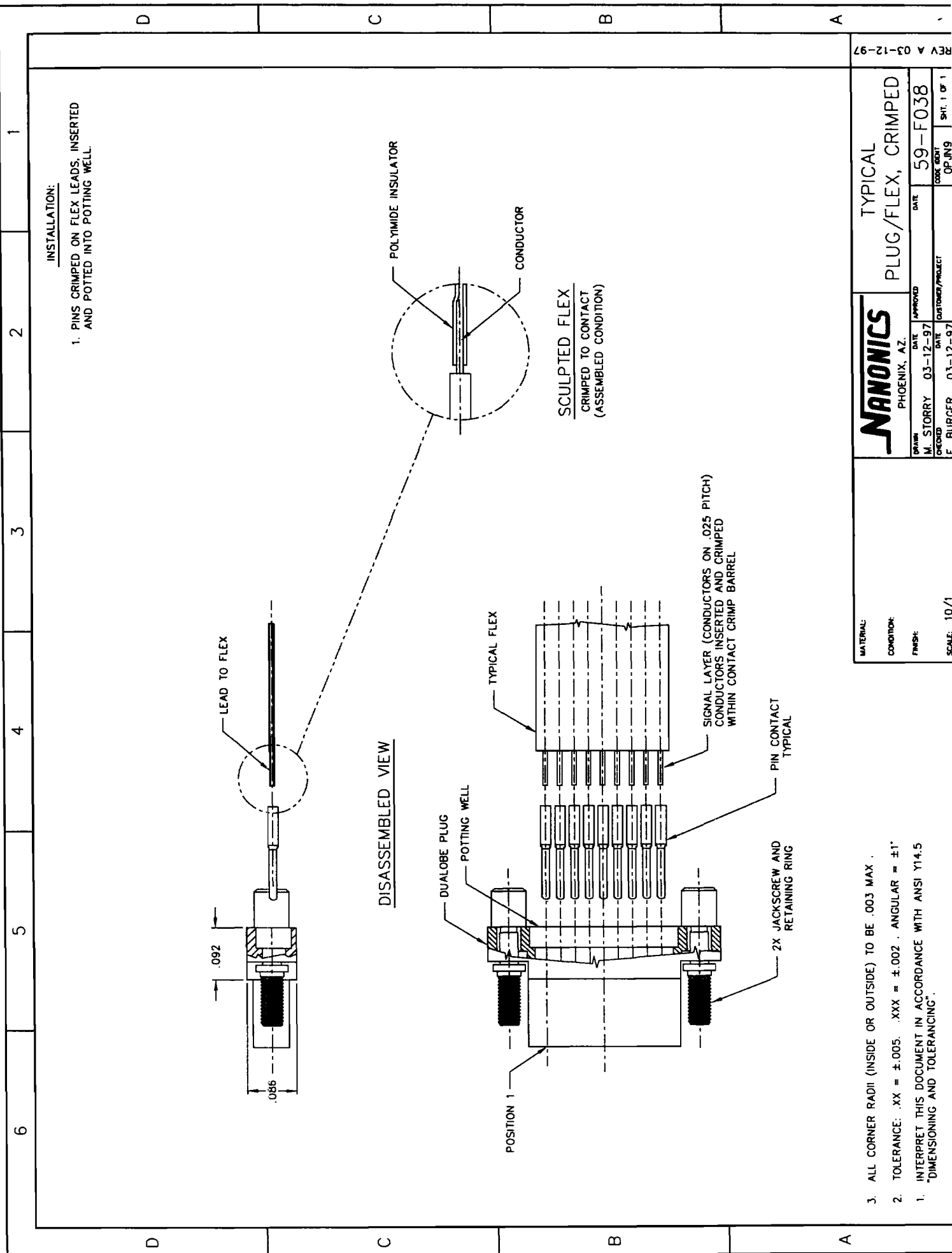
21644 N 14th Ave.

Phoenix, AZ. 85027-2840

Telephone 602-581-6188

FAX 602-581-8242

NANOS005



INSTALLATION:

1. PINS CRIMPED ON FLEX LEADS, INSERTED AND POTTED INTO POTTING WELL.

DISASSEMBLED VIEW

SCULPTED FLEX
CRIMPED TO CONTACT
(ASSEMBLED CONDITION)

MATERIAL:		TYPICAL	
CONDITION:		PLUG/FLEX, CRIMPED	
FINISH:		DATE:	DATE:
		03-12-97	59-F038
SCALE: 10/1		DESIGNED:	DATE:
		F. BLURCFR	03-17-97
		PHOENIX, AZ.	DATE:
		APPROVED:	DATE:
			03-12-97
		CUSTOMER/PRODUCT:	DATE:
			03-12-97
		SHEET:	1 OF 1
		REV A	03-12-97

- ALL CORNER RADI (INSIDE OR OUTSIDE) TO BE .003 MAX.
- TOLERANCE: .XX = ±.005. .XXX = ±.002. ANGULAR = ±1°
- INTERPRET THIS DOCUMENT IN ACCORDANCE WITH ANSI Y14.5 "DIMENSIONING AND TOLERANCING".

HOW TO ORDER

PART NUMBER SELECTION

The selection chart enables building a part number for most of the standard variations. Many other options are available and the factory should be contacted to obtain further information.

Select codes for entries referring to the applicable descriptions. Refer to the samples. Part numbers should end with any entry, 3 thru 6, whichever is the last selected.

SAMPLE PART NUMBERS

Metal shell, 2 row plug, Dualobe design

STM037PC2DC015N; (STM) Dualobe 2 row metal shell plug, (037) 37 positions, (PC) pin contacts, (2) 30 AWG 7/38 stranded wire, (DC) color coded teflon insulation, (015) 15 inch length, (N) 1.0 MM stainless steel captive jackscrews.

Metal shell, 2 row receptacle, Dualobe design, Surface Mount

STM037L2HN; (STM) Dualobe, 2 row metal shell receptacle, (037) 37 positions, (L2) horizontal surface mount, (H) 1.0 MM mounting screws, (N) thread for 1.0 MM jackscrews.

ENTRY	CODE	PRODUCT TYPE DESCRIPTION
1. Series <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Enter Series Code	USS SSP STP SSM STM	UNSHROUDED SINGLE ROW STRIP DUALOBE SINGLE ROW PLASTIC DUALOBE TWO-ROW PLASTIC DUALOBE SINGLE ROW METAL SHELL DUALOBE TWO-ROW METAL SHELL
2. Size <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Enter Size Code	H E F 009 015 025 037 051 065	HERMETIC ENVIRONMENTAL <input type="checkbox"/> Call Factory for Details. FILTERED CONTACT POSITIONS - Stocked sizes (2-65 available; Call factory.)

CODE	DESCRIPTION
3. FOR THROUGH-HOLE AND SURFACE MOUNT (SM)	
SM OR THRU-HOLE; Solid Leads are 30 AWG Copper, Square Ni/Sn/Pb plated. Other lead materials and finishes available. Call for details.	
A. SURFACE MOUNT	
B2	Pin, SM, horiz. mount, plug
B4	Pin, SM, 90 deg. vert mount, plug
L2	Socket, SM horiz. mount, receptacle
L4	Socket, SM 90 deg. vert mount, receptacle
Others available, call factory.	
B. THRU-HOLE	
M5	Socket, vert. mount, .050" grid, encapsulated
M6	Socket, horiz. mount, .050" grid, encapsulated
Many configurations are available for thru-hole mounting, both vertical and horizontal, and with PCB pin-outs on .050" grid. Thru-hole connectors are normally provided epoxy encapsulated using a predrilled circuit board to insure proper lead registration, ease of installation and a thermal match to circuit board material. Call factory for details.	

3. FOR WIRE TERMINATIONS ONLY

CONTACT	CODE	DESCRIPTION
<input type="checkbox"/> <input type="checkbox"/>	PC SC	Pin, crimped wire (PLUG) Socket, crimped wire (RECEPTACLE)
SIZE WIRE	2 3 4 #	30AWG, 7/38 stranded 32AWG, 7/40 stranded 34AWG, 7/42 stranded Other, call for Code No.
TYPE	DX DC GX FX CX	Teflon, hookup, white Teflon, hookup, color coded Teflon, Ribbon Cable FLEX CIRCUITS Teflon, coax Others available, call for Code.
LENGTH	###	(Insert length required; Enter inches; examples, 012, or centimeters, C30, or meters, M06)

4. Polarization	CODES	DESCRIPTION										
<input type="checkbox"/>	H J E A B	- 1.0 MM SCREW, (Recommended Size) - ADHESIVE MT. - 1.2 MM SCREW, (Optional Size) Other options available, call for details.										
5. Mounting	<table border="1"> <tr><td>H</td><td>J</td><td>E</td><td>A</td><td>B</td></tr> <tr><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td></tr> </table>	H	J	E	A	B	•	•	•	•	•	
H	J	E	A	B								
•	•	•	•	•								
6. Jackscrews	<table border="1"> <tr><td>N</td><td>Q</td></tr> <tr><td>•</td><td>•</td></tr> </table>	N	Q	•	•	----- NON-CAPTIVE, 1.0 MM (Recommended Size) ----- CAPTIVE, 1.0 MM (Recommended Size) ----- CAPTIVE, 1.2 MM (Optional Size)						
N	Q											
•	•											

