



## Features

- Available in Standard Density 25D, 37D, and 50D as well as in High Density 78DD and 104DD
- D connectors are high quality Positronic Industries, Inc ®
- Test points are 0.080" Tip Jacks (typical voltmeter size probes)
- Tip Jack spacing of 0.5" supports shorting plugs
- Available with or without toggle switches
- Toggle switches are rated for Low Level and Power signals
- Signal connectivity via Printed Circuit Board. No wires.
- 2 & 3 oz copper signal traces
- Housed in a heavy duty 0.080 thick aluminum box with welded corners
- Sturdy handle and rubber feet
- Box is painted with two coats of Epoxy paint



Figure 1 37D Breakout Box with switches PN SE-01007-1

## Description

Silver Engineering's D Series Breakout Box is a heavy duty break out box designed to withstand the abuses of the test environment. The heavy duty construction and the use of high quality components insure these units will last for years.

The D Series Breakout Boxes incorporates a printed circuit board for all connectivity.

D Series Breakout Boxes use a color coding scheme as an aid. The Red tip jacks connect to the Red side D connector and the Black tip jacks connect to the Black connector. The D Series Breakout Boxes can be ordered with or without switches and mini-banana or banana jacks instead of tip jacks.

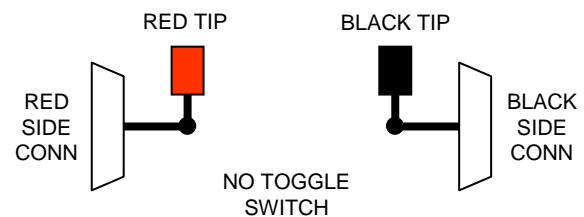
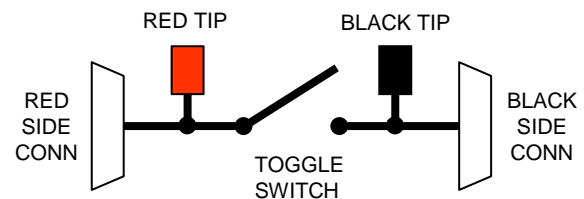


Figure 2 Block diagrams, with and without toggle switches

# Specifications

PART NUMBER		CONNECTOR GENDER		PCB CU NOTE 1	MAX CURRENT NOTE 1, 2	MAX VOLTAGE NOTE 3	MAX TRACE LENGTH NOTE 4	DIMENSIONS		
WITH SWITCHES	WITHOUT SWITCHES	RED SIDE	BLACK SIDE					LENGTH NOTE 5	WIDTH	HEIGHT NOTE 6
SE-01002-1	SE-01002-2	25D MALE	25D FEMALE	3 OZ	4.55A	33Vrms/70VDC	16.8"	7"	7.2"	1.5"
SE-01007-1	SE-01007-2	37D MALE	37D FEMALE	3 OZ	4.55A	33Vrms/70VDC	22"	9"	7.9"	1.5"
SE-01003-1	SE-01003-2	50D MALE	50D MALE	3 OZ	5.9A	33Vrms/70VDC	25"	11"	7.9"	1.5"
NE-01002-1	SE-01001-1	78HDD MALE	78HDD MALE	2 OZ	3.2A	33Vrms/70VDC	30"	13"	10.0"	1.5"
SE-01008-1	SE-01008-2	104HDD MALE	104HDD FEMALE	2 OZ	4.9A	33Vrms/70VDC	36"	15.2"	11.4"	1.5"

NOTE 1 Starting with Breakout Box Serial Number 02398, For earlier serial numbers, contact factory for max current specifications

NOTE 2 Maximum recommended current for one circuit active. De-rate current linearly to 25% of maximum recommended current if all circuits active simultaneously. For I = max. recommended current, N = total number of device circuits, n = circuits used, i = de-rated current each circuit,  $i = I + (0.75 * I * (n - 1) / (1 - N))$ .

NOTE 3 33Vrms/70VDC recommended for safe handheld use. Unit is Hipot tested at 500VDC.

NOTE 4 Measured from one connector solder pad to switch pad plus switch pad to the other connector solder pad.

NOTE 5 Length does not include 1.4" handle or 0.25" D connector protrusion.

NOTE 6 Height does not include tip jack or toggle switch (0.5") or rubber feet (0.2").

All specifications are subject to change without notice.

## Connectors and Jack Socket Screws

- All our standard Breakout Boxes use high quality Positronic™ Connectors.
- Standard Density Breakout Boxes (25D, 37D, and 50D) use Positronic™ MD series with Tin Plated Shell. Example: 50D (SE-01003) uses a MD50M4R700X.
- High Density Breakout Boxes (78D and 104D) use Positronic™ DD series with Tin Plated Shell. Example: 104HDD (SE-01008) uses a DD104M4R7000X.
- All our Breakout Boxes use 3M™ Jack Sockets Screws part number 3341-1S. These are steel material finished with a zinc/clear chromate.

## Non-Standard Options

- Breakout Boxes can be ordered with Stainless Steel connectors and Jack Sockets.
- Breakout Boxes can be ordered with Mini-Banana Jacks instead of Tip-Jacks.
- Circuit Boards can be ordered with thicker copper for higher current capacity.
- Custom Breakout Boxes per your specifications.

Contact Silver Engineering Inc for non-standard options or custom requirements.

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Close up photos of a 37 Pin Breakout Box PN SE-01007