



# THE DATASHEET OF GCB20DHL D

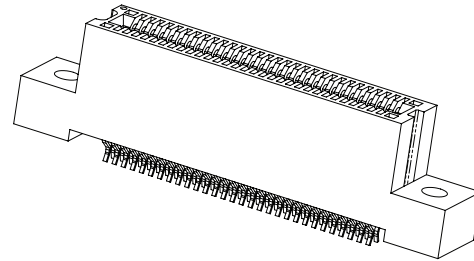




**.050" [1.27 mm] Contact Centers, .610" [15.49 mm] Insulator Height,**  
**Dip Solder/Card Extender/SMT for .031" [0.79 mm], .062" [1.57 mm] or .093" [2.36 mm] Mating PCB**

## SPECIFICATIONS

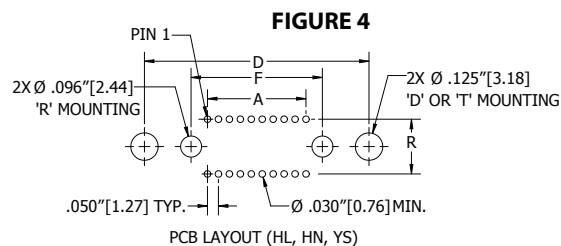
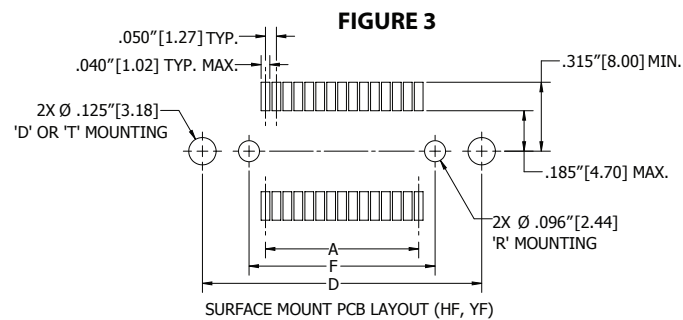
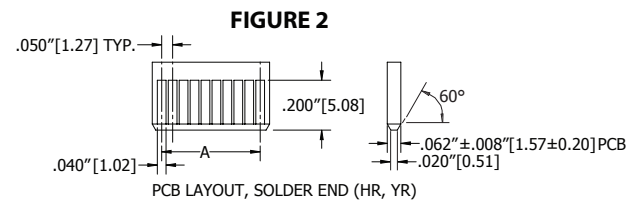
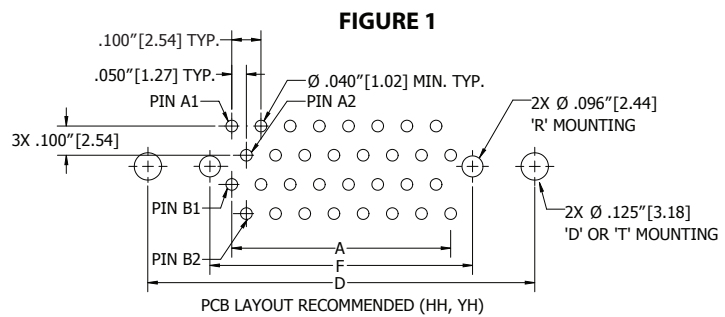
- Accommodates  $.031" \pm .006"$  [0.79 mm  $\pm$  0.15 mm],  $.062" \pm .008"$  [1.57 mm  $\pm$  0.20 mm] or  $.093" \pm .008"$  [2.36 mm  $\pm$  0.20 mm] mating PCB
- PPS or PA9T insulator
- Molded-in key available
- High reliability/high cycle hairpin bellow & cantilever contacts
- 1 Amp current rating per contact for contacts fully energized
- UL Flammability Rating: 94V-0
- Operating Temperature: -65°C up to +200°C



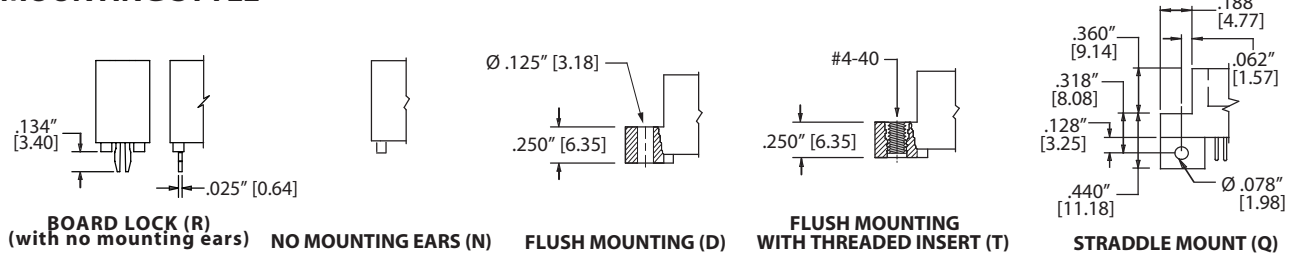
High Density Card Edge

## TERMINATION TYPE

HAIR PIN POST .018" [0.46] X .012" [0.30]	(P/N CODE) TERMINATION LAYOUT	ROW SPACING (‘R’ DIM)	TAIL LENGTH (‘L’ DIM)
	(HH) THRU HOLE STRAIGHT figure 1	3 X 0.100" [2.54]	0.125" [3.18]
	(HR) CARD EXTENDER figure 2	ACCEPTS .062" [1.57] PCB	0.160" [4.06]
	(HF) SURFACE MOUNT figure 3	N/A	0.100" [2.54]
	(HL) THRU HOLE STRAIGHT figure 4	0.250" [6.35]	0.160" [4.06]
	(HN) THRU HOLE STRAIGHT figure 4	0.100" [2.54]	0.125" [3.18]
CANTILEVER POST SIZE .016" [0.41] SQ.	(P/N CODE) TERMINATION LAYOUT	ROW SPACING (‘R’ DIM)	TAIL LENGTH (‘L’ DIM)
	(YH) THRU HOLE STRAIGHT figure 1	3 X 0.100" [2.54]	0.125" [3.18]
	(YR) CARD EXTENDER figure 2	ACCEPTS .062" [1.57] PCB	0.175" [4.45]
	(YF) SURFACE MOUNT figure 3	N/A	0.100" [2.54]
	(YS) THRU HOLE STRAIGHT figure 4	0.200" [5.08]	0.140" [3.56]



## MOUNTING STYLE





### .050" [1.27 mm] Contact Centers, .610" [15.49 mm] Insulator Height, Dip Solder/Card Extender/SMT for .031"[0.79mm], .062"[1.57mm] or .093"[2.36mm] Mating PCB

High Density Card Edge

#### PART NUMBER OPTIONS

**G B B 40 D HH D - Sxxx**

#### MATERIALS (INSULATOR/CONTACT)

- G = PA9T/Phosphor Bronze
- R = PPS/Phosphor Bronze
- J = PA9T/Beryllium Copper
- A = PPS/Beryllium Copper
- F = PPS/Spinodal\*\*

Refer to Page 7 for Operating/Processing Temperatures

#### CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate  
**Contact Surface Termination**

- B = .000010" Gold .000100" Pure Tin, Matte
- C = .000030" Gold .000100" Pure Tin, Matte
- \*\*\*M = .000030" Gold .000010" Gold Overall

\*\*\* (YH, YR, YF & YS Termination only)

#### CONTACT CENTERS

- B = .050" [1.27 mm]

#### NUMBER OF CONTACT POSITIONS

See Chart Below

#### MODIFICATION CODE (Consult Factory)

OMIT FOR STANDARD

-S1648 = .031" ± .006" [0.79 ± 0.15] Mating PCB

-S1763 = .093" ± .008" [2.36 ± 0.20] Mating PCB

(for HH, HR, HF, HN & HL Termination Only)

#### MOUNTING STYLE (Opposite Page)

- D = Flush Mounting
- N = No Mounting
- T = Flush Mounting With Threaded Insert
- Q = Straddle Mount (Card Extender Only)\*
- R = Metal Board Locks

#### TERMINATION TYPE (Opposite Page)

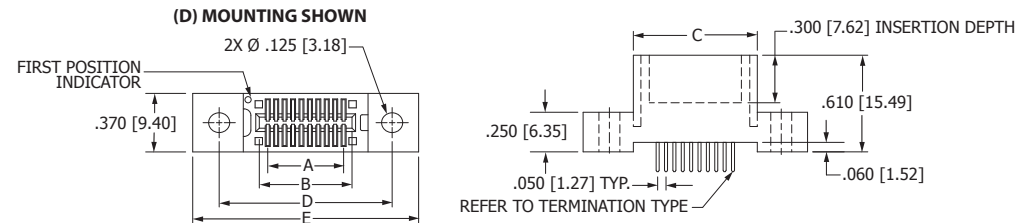
- HH, YH = Staggered Dip Solder
- HR, YR = Card Extender
- HF, YF = Surface Mount
- HL = Dip Solder
- HN = Dip Solder
- YS = Dip Solder

#### READOUT (Opposite Page)

- D = Dual

\*\*Consult factory for special soldering guidelines. YH, YR, YF & YS termination with 'M' plating only.

#### DIMENSIONS Dimensions in [ ] are in millimeters, all others are in inches.



POSITIONS/ CONTACTS	INCHES						MILLIMETERS					
	A±.005	B±.005	C±.015	D±.010	E±.020	F±.010	A±0.13	B±0.13	C±0.38	D±0.25	E±0.51	F±0.25
05/10	0.200	0.300	0.490	0.776	1.090	0.350	5.08	7.62	12.45	19.71	27.69	8.89
06/12	0.250	0.350	0.540	0.826	1.140	0.400	6.35	8.89	13.72	20.98	28.96	10.16
08/16	0.350	0.450	0.640	0.926	1.240	0.500	8.89	11.43	16.26	23.52	31.50	12.70
09/18	0.400	0.500	0.690	0.976	1.290	0.550	10.16	12.70	17.53	24.79	32.77	13.97
10/20	0.450	0.550	0.740	1.026	1.340	0.600	11.43	13.97	18.80	26.06	34.04	15.24
13/26	0.600	0.700	0.890	1.176	1.490	0.750	15.24	17.78	22.61	29.87	37.85	19.05
14/28	0.650	0.750	0.940	1.226	1.540	0.800	16.51	19.05	23.88	31.14	39.12	20.32
15/30	0.700	0.800	0.990	1.276	1.590	0.850	17.78	20.32	25.15	32.41	40.39	21.59
16/32	0.750	0.850	1.040	1.326	1.640	0.900	19.05	21.59	26.42	33.68	41.66	22.86
20/40	0.950	1.050	1.240	1.526	1.840	1.100	24.13	26.67	31.50	38.76	46.74	27.94
22/44	1.050	1.150	1.340	1.626	1.940	1.200	26.67	29.21	34.04	41.30	49.28	30.48
24/48	1.150	1.250	1.440	1.726	2.040	1.300	29.21	31.75	36.58	43.84	51.82	33.02
25/50	1.200	1.300	1.490	1.776	2.090	1.350	30.48	33.02	37.85	45.11	53.09	34.29
28/56	1.350	1.450	1.640	1.926	2.240	1.500	34.29	36.83	41.66	48.92	56.90	38.10
30/60	1.450	1.550	1.740	2.026	2.340	1.600	36.83	39.37	44.20	51.46	59.44	40.64
34/68	1.650	1.750	1.940	2.226	2.540	1.800	41.91	44.45	49.28	56.54	64.52	45.72
35/70	1.700	1.800	1.990	2.276	2.590	1.850	43.18	45.72	50.55	57.81	65.79	46.99
40/80	1.950	2.050	2.240	2.526	2.840	2.100	49.53	52.07	56.90	64.16	72.14	53.34
41/82*	2.000	2.100	2.290	2.576	2.890	2.150	50.80	53.34	58.17	65.43	73.41	54.61
44/88	2.150	2.250	2.440	2.726	3.040	2.300	54.61	57.15	61.98	69.24	77.22	58.42
45/90	2.200	2.300	2.490	2.776	3.090	2.350	55.88	58.42	63.25	70.51	78.49	59.69
50/100	2.450	2.550	2.740	3.026	3.340	2.600	62.23	64.77	69.60	76.86	84.84	66.04
55/110	2.700	2.800	2.990	3.276	3.590	2.850	68.58	71.12	75.95	83.21	91.19	72.39
60/120	2.950	3.050	3.240	3.526	3.840	3.100	74.93	77.47	82.30	89.56	97.54	78.74
62/124	3.050	3.150	3.340	3.626	3.940	3.200	77.47	80.01	84.84	92.10	100.08	81.28
64/128	3.150	3.250	3.440	3.726	4.040	3.300	80.01	82.55	87.38	94.64	102.62	83.82
65/130	3.200	3.300	3.490	3.776	4.090	3.350	81.28	83.82	88.65	95.91	103.89	85.09
66/132	3.250	3.350	3.540	3.826	4.140	3.400	82.55	85.09	89.92	97.18	105.16	86.36
70/140	3.450	3.550	3.740	4.026	4.340	3.600	87.63	90.17	95.00	102.26	110.24	91.44
75/150	3.700	3.800	3.990	4.276	4.590	3.850	93.98	96.52	101.35	108.61	116.59	97.79
80/160	3.950	4.050	4.240	4.526	4.840	4.100	100.33	102.87	107.70	114.96	122.94	104.14
81/162	4.000	4.100	4.290	4.576	4.890	4.150	101.60	104.14	108.97	116.23	124.21	105.41
85/170*	4.200	4.300	4.490	4.776	5.090	4.350	106.68	109.22	114.05	121.31	129.29	110.49
90/180	4.450	4.550	4.740	5.026	5.340	4.600	113.03	115.57	120.40	127.66	135.64	116.84
92/184*	4.550	4.650	4.840	5.126	5.440	4.700	115.57	118.11	122.94	130.20	138.18	119.38
95/190	4.700	4.800	4.990	5.276	5.590	4.850	119.38	121.92	126.75	134.01	141.99	123.19
96/192*	4.750	4.850	5.040	5.326	5.640	4.900	120.65	123.19	128.02	135.28	143.26	124.46
100/200	4.950	5.050	5.240	5.526	5.840	5.100	125.73	128.27	133.10	140.36	148.34	129.54
105/210	5.200	5.300	5.490	5.776	6.090	5.350	132.08	134.62	139.45	146.71	154.69	135.89
106/212	5.250	5.350	5.540	5.826	6.140	5.400	133.35	135.89	140.72	147.98	155.96	137.16
108/216*	5.350	5.450	5.640	5.926	6.240	5.500	135.89	138.43	143.26	150.52	158.50	139.70
110/220	5.450	5.550	5.740	6.026	6.340	5.600	138.43	140.97	145.80	153.06	161.04	142.24
120/240	5.950	6.050	6.240				151.13	153.67	158.50			154.94

\* Consult factory for availability.

## Looking for pricing, stock, or lifecycle information?

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