

**Spring finger contacts** are used for grounding and dynamic connections on electronic assemblies.

These spring finger contacts (SMT) are designed to withstand tens of thousands of compression cycles. They are widely used for connections on automotive projects for example. These spring finger contacts are delivered in reel for automatic SMT assembly.

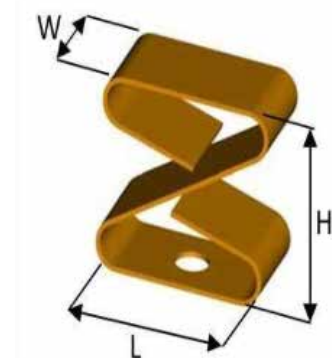
We provide compression rates and associated forces for each spring finger contact on request. Recommended compression is 20% to 40% of the overall contact height.

Spring finger contacts (SMT) can be standard (see our catalog below) or tailor-made.

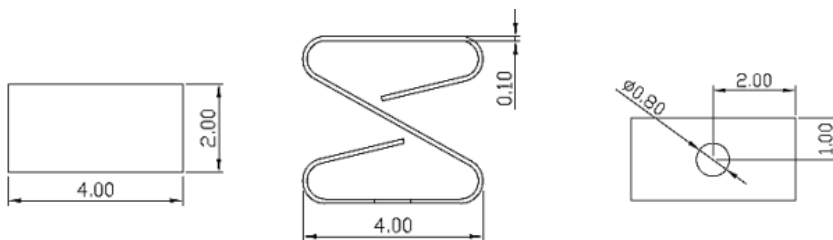


## PRODUCT SPECIFICATIONS

PROPERTY		VALUE TOLERANCE
Thickness		0,01 mm
Width		2,00 mm $\pm$ 0,2
Length		4,00 mm $\pm$ 0,2
Height		3,70 mm $\pm$ 0,2
Basic material		Copper beryllium (CuBe)
Plating	Barrier layer NI Outer layer AU	1 $\mu$ m - 2 $\mu$ m 0.025 $\mu$ m - 0.075 $\mu$ m

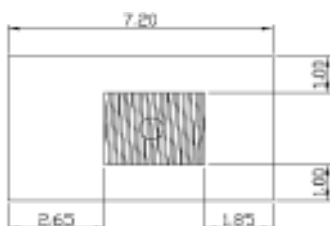


## DIMENSIONS (mm)

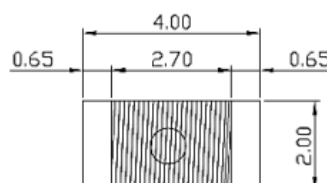


## RECOMMENDED RESERVED AREA & PAD FOR THE PCB (mm)

RECOMMENDED RESERVED AREA ON THE PCB (mm)



RECOMMENDED PAD FOR THE PCB (mm)



### DISCLAIMER

This is only a recommendation based on information available to COMPELMA at the time of printing. Actual land pattern can be significantly different due to various materials and processes used in PCB assembly. COMPELMA makes no representation or warranty of performance based on the recommended land pattern.

## BUILDING AN ITEM NUMBER

OTG 20 40 037

①

②

③

④

① Contact Spring

② Width (ex : 1,5mm = 15)

③ Length (ex : 2,5mm = 15)

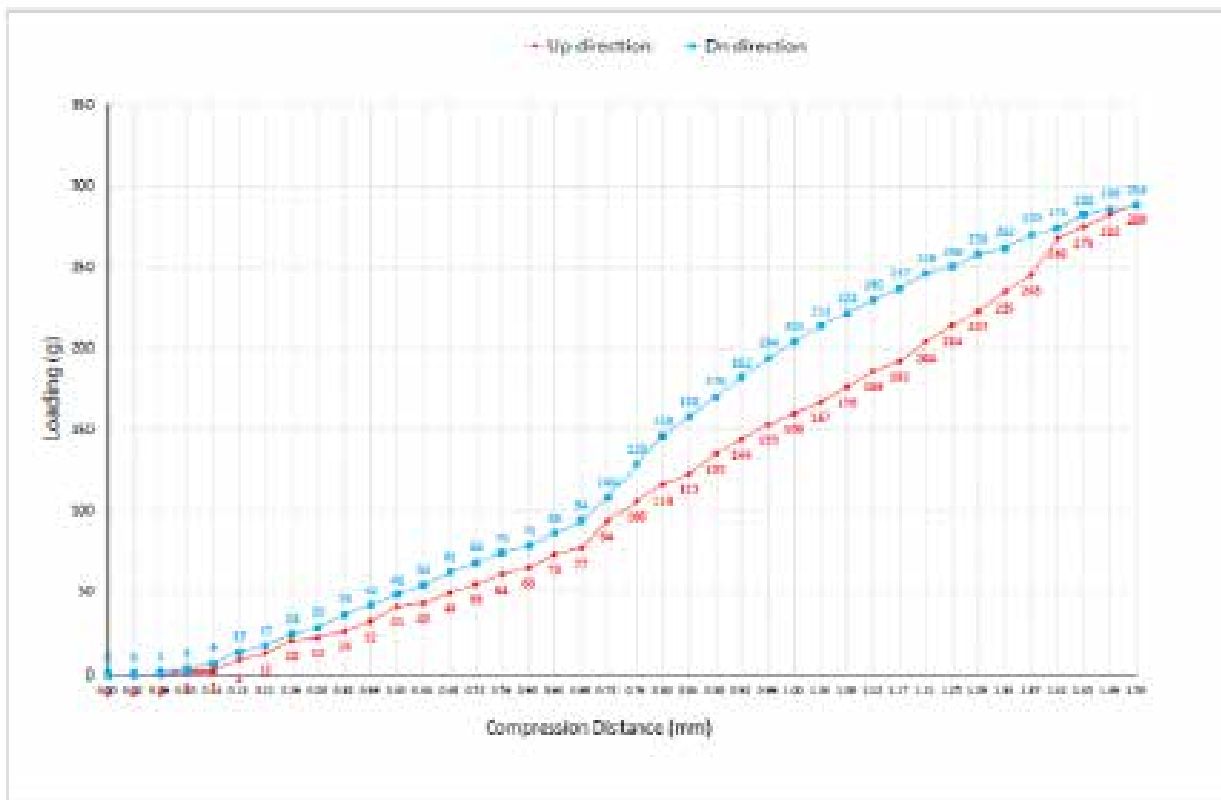
④ Height (ex : 85mm = 085)

Standard material is CuBe with gold plating.

For stainless material instead of CuBe material : add -S at the end of the reference.

For tin plating instead of gold plating : add -T at the end of the reference.

## FORCE DEFLECTION DIAGRAM\*



Initial Compression Distance (mm)	1.48	
displacement (mm)	Loading force(g)	Loading force(g)
	Down direction	Up direction
0.00	0	0
0.02	0	0
0.04	1	0
0.06	3	1
0.08	6	3
0.09	10	6
0.10	15	10
0.12	24	15
0.14	35	24
0.16	48	35
0.20	63	48
0.24	80	63
0.28	97	80
0.32	115	97
0.36	133	115
0.40	152	133
0.44	171	152
0.48	191	171
0.52	211	191
0.56	231	211
0.60	252	231
0.64	273	252
0.68	294	273
0.72	315	294
0.76	336	315
0.80	357	336
0.84	378	357
0.88	399	378
0.92	420	399
0.96	441	420
1.00	462	441
1.04	483	462
1.08	504	483
1.12	525	504
1.16	546	525
1.20	567	546
1.24	588	567
1.28	609	588
1.32	630	609
1.36	651	630
1.40	672	651
1.44	693	672
1.48	714	693
1.52	735	714
1.56	756	735
1.60	777	756
1.64	798	777
1.68	819	798
1.72	840	819
1.76	861	840
1.80	882	861
1.84	903	882
1.88	924	903
1.92	945	924
1.96	966	945
2.00	987	966
2.04	1008	987
2.08	1029	1008
2.12	1050	1029
2.16	1071	1050
2.20	1092	1071
2.24	1113	1092
2.28	1134	1113
2.32	1155	1134
2.36	1176	1155
2.40	1197	1176
2.44	1218	1197
2.48	1239	1218
2.52	1260	1239
2.56	1281	1260
2.60	1302	1281
2.64	1323	1302
2.68	1344	1323
2.72	1365	1344
2.76	1386	1365
2.80	1407	1386
2.84	1428	1407
2.88	1449	1428
2.92	1470	1449
2.96	1491	1470
3.00	1512	1491
3.04	1533	1512
3.08	1554	1533
3.12	1575	1554
3.16	1596	1575
3.20	1617	1596
3.24	1638	1617
3.28	1659	1638
3.32	1680	1659
3.36	1701	1680
3.40	1722	1701
3.44	1743	1722
3.48	1764	1743
3.52	1785	1764
3.56	1806	1785
3.60	1827	1806
3.64	1848	1827
3.68	1869	1848
3.72	1890	1869
3.76	1911	1890
3.80	1932	1911
3.84	1953	1932
3.88	1974	1953
3.92	1995	1974
3.96	2016	1995
4.00	2037	2016
4.04	2058	2037
4.08	2079	2058
4.12	2100	2079
4.16	2121	2100
4.20	2142	2121
4.24	2163	2142
4.28	2184	2163
4.32	2205	2184
4.36	2226	2205
4.40	2247	2226
4.44	2268	2247
4.48	2289	2268
4.52	2310	2289
4.56	2331	2310
4.60	2352	2331
4.64	2373	2352
4.68	2394	2373
4.72	2415	2394
4.76	2436	2415
4.80	2457	2436
4.84	2478	2457
4.88	2499	2478
4.92	2520	2499
4.96	2541	2520
5.00	2562	2541
5.04	2583	2562
5.08	2604	2583
5.12	2625	2604
5.16	2646	2625
5.20	2667	2646
5.24	2688	2667
5.28	2709	2688
5.32	2730	2709
5.36	2751	2730
5.40	2772	2751
5.44	2793	2772
5.48	2814	2793
5.52	2835	2814
5.56	2856	2835
5.60	2877	2856
5.64	2898	2877
5.68	2919	2898
5.72	2940	2919
5.76	2961	2940
5.80	2982	2961
5.84	3003	2982
5.88	3024	3003
5.92	3045	3024
5.96	3066	3045
6.00	3087	3066
6.04	3108	3087
6.08	3129	3108
6.12	3150	3129
6.16	3171	3150
6.20	3192	3171
6.24	3213	3192
6.28	3234	3213
6.32	3255	3234
6.36	3276	3255
6.40	3297	3276
6.44	3318	3297
6.48	3339	3318
6.52	3360	3339
6.56	3381	3360
6.60	3402	3381
6.64	3423	3402
6.68	3444	3423
6.72	3465	3444
6.76	3486	3465
6.80	3507	3486
6.84	3528	3507
6.88	3549	3528
6.92	3570	3549
6.96	3591	3570
7.00	3612	3591
7.04	3633	3612
7.08	3654	3633
7.12	3675	3654
7.16	3696	3675
7.20	3717	3696
7.24	3738	3717
7.28	3759	3738
7.32	3780	3759
7.36	3801	3780
7.40	3822	3801
7.44	3843	3822
7.48	3864	3843
7.52	3885	3864
7.56	3906	3885
7.60	3927	3906
7.64	3948	3927
7.68	3969	3948
7.72	3990	3969
7.76	4011	3990
7.80	4032	4011
7.84	4053	4032
7.88	4074	4053
7.92	4095	4074
7.96	4116	4095
8.00	4137	4116
8.04	4158	4137
8.08	4179	4158
8.12	4200	4179
8.16	4221	4200
8.20	4242	4221
8.24	4263	4242
8.28	4284	4263
8.32	4305	4284
8.36	4326	4305
8.40	4347	4326
8.44	4368	4347
8.48	4389	4368
8.52	4410	4389
8.56	4431	4410
8.60	4452	4431
8.64	4473	4452
8.68	4494	4473
8.72	4515	4494
8.76	4536	4515
8.80	4557	4536
8.84	4578	4557
8.88	4599	4578
8.92	4620	4599
8.96	4641	4620
9.00	4662	4641
9.04	4683	4662
9.08	4704	4683
9.12	4725	4704
9.16	4746	4725
9.20	4767	4746
9.24	4788	4767
9.28	4809	4788
9.32	4830	4809
9.36	4851	4830
9.40	4872	4851
9.44	4893	4872
9.48	4914	4893
9.52	4935	4914
9.56	4956	4935
9.60	4977	4956
9.64	4998	4977
9.68	5019	4998
9.72	5040	5019
9.76	5061	5040
9.80	5082	5061
9.84	5103	5082
9.88	5124	5103
9.92	5145	5124
9.96	5166	5145
10.00	5187	5166

Force-Compression Distance(mm)	1.50	
displacement (mm)	Loading force(g)	Loading force(g)
	Down direction	up direction
0.00	145	145
0.02	158	157
0.04	170	169
0.06	182	181
0.08	194	193
0.10	206	205
0.12	218	217
0.14	230	229
0.16	242	241
0.18	254	253
0.20	266	265
0.22	278	277
0.24	290	289
0.26	302	301
0.28	314	313
0.30	326	325
0.32	338	337
0.34	350	349
0.36	362	361
0.38	374	373
0.40	386	385
0.42	398	397
0.44	410	409
0.46	422	421
0.48	434	433
0.50	446	445
0.52	458	457
0.54	470	469
0.56	482	481
0.58	494	493
0.60	506	505
0.62	518	517
0.64	530	529
0.66	542	541
0.68	554	553
0.70	566	565
0.72	578	577
0.74	590	589
0.76	602	601
0.78	614	613
0.80	626	625

NOTE

\*Only valid for gold plated version