SMT CONTACT SPRINGS
OTG2030040

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

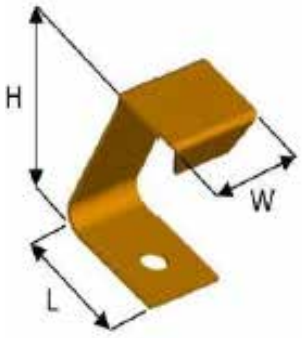
These spring finger contacts (SMT) are designed to withstand tens of thousands of compression cycles. They are widely used for connections on automotive projects for example. These spring finger contacts are delivered in reel for automatic SMT assembly.

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.

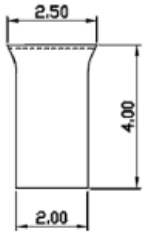
Spring finger contacts (SMT) can be standard (see our catalog below) or tailor-made.

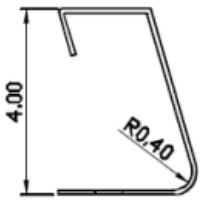
PRODUCT SPECIFICATIONS

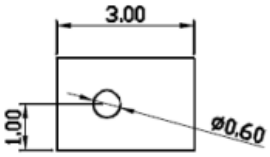
PROPERTY		VALUE TOLERANCE
Thickness		0,01 mm
Width		2,00 mm ± 0,2
Length		3,00 mm ± 0,2
Height		4,00 mm ± 0,2
Basic material		Copper berylluim (CuBe)
Plating	Barrier layer NI Outer layer AU	1µm - 2µm 0.025µm - 0.075µm



DIMENSIONS (mm)

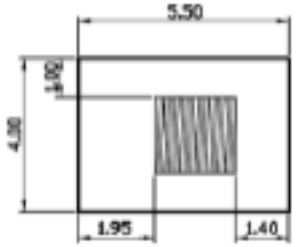




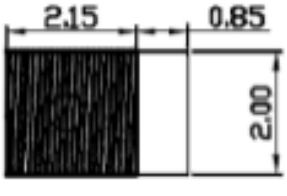


RECOMMENDED RESERVED AREA & PAD FOR THE PCB (mm)

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.

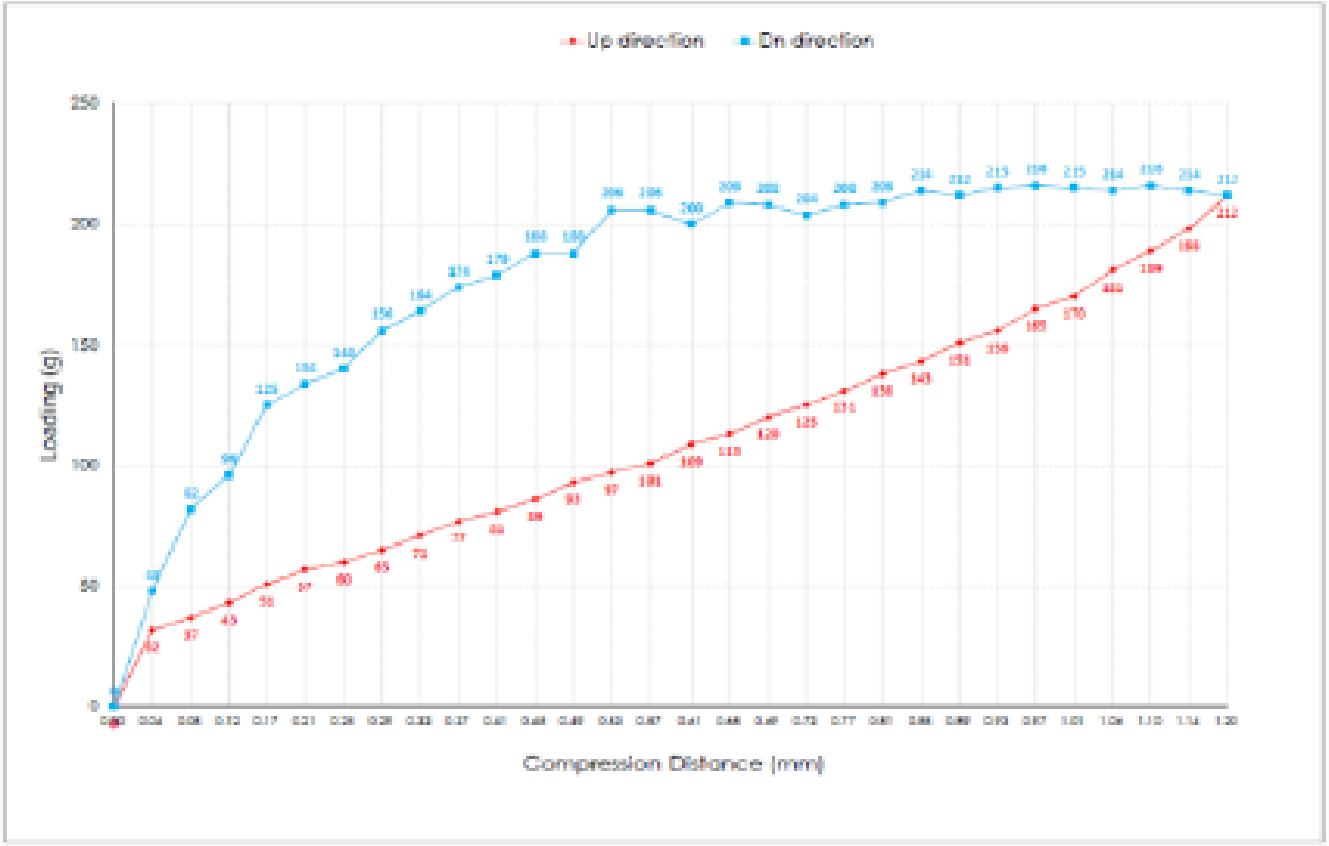
BUILDING AN ITEM NUMBER

OTG 20 30 040
❶ ❷ ❸ ❹

❶ *Contact Spring*
❷ *Width (ex : 1,5mm = 15)*
❸ *Length (ex : 2,5mm = 15)*
❹ *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*



Total Compression Distance (mm)	1.30mm	
Displacement (mm)	Loading force(g) Down direction	Loading force(g) Up direction
0.00	0	0
0.04	48	32
0.08	80	37
0.13	96	43
0.17	108	51
0.21	124	57
0.25	140	65
0.29	156	65
0.33	164	71
0.37	174	77
0.41	178	81
0.45	188	86
0.49	188	93
0.53	204	97
0.57	204	101

Total Compression Distance (mm)	1.30mm	
Displacement (mm)	Loading force(g) Down direction	Loading force(g) Up direction
0.61	206	109
0.65	206	113
0.69	208	120
0.73	204	122
0.77	208	131
0.81	208	135
0.85	214	143
0.89	212	151
0.93	215	156
0.97	215	165
1.01	214	170
1.06	214	181
1.10	214	189
1.14	214	199
1.30	212	212

NOTE

*Only valid for gold plated version