Heraeus

MaxSoft_{LD}

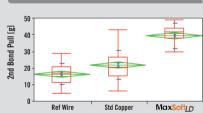
Large Copper Wire Demanding 1st & 2nd Bond Applications





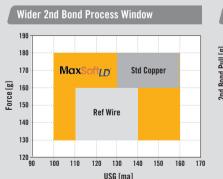


Higher Stitch Pull Values



Wire diameter: 50 $\mu m\cdot$ Device: PLCC68L Package Capillary: CU-L8-1209-P37 (H2.5, CD3.1, T8.2, FA08) Bonder: 8028PPS \cdot Bonding Temperature: 220°C

Wire diameter: 50 µm · Device: TSSOP Package Capillary: CU-L8-1302-P37 (H2.6, CD3.7, T8.0, FA08) Bonder: Maxum Plus · Bonding Temperature: 240°C



Recommended Technical Data of MaxSoffLD						
Diameter	Microns	38	45	50	63	75
	Mils	1.5	1.8	2.0	2.5	3.0
Recommended Specs for Ball Bonding						
Elongation (%)		10 - 20	10 - 20	10 – 20	10 - 25	10 – 25
Breaking Load (g)		15 - 35	22 – 42	30 – 50	50 - 80	70 – 110

For other diameters, please contact Heraeus Bonding Wire sales representative.

MaxSoftLD Benefits

- Superior 1st and 2nd bond performance
- Soft wire characteristics enable
- Bonding on challenging pad structure
- Higher stitch pull value for a stronger
 2nd bond
- Robust and wider 2nd bond process window
- High reliability wire with slow and uniform intermetallic growth
- Available in large diameters ranging from
 1.5 mil to 3.0 mil (38 μm to 75 μm)

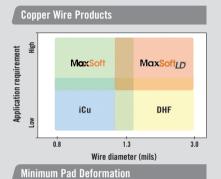
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ft_{LD} Characteristics for 50 μm diameter wire **Physical Properties** Density 8.92 g/cm3 1083 °C Melting Point Thermal Conductivity 401 W/m.K Specific Heat Capacity @ 25 °C 385 J/kg.K Coeff. of Thermal Expansion $16.5 \mu m/m °C, (20 - 100 °C)$ **Electrical Resistivity** $1.69~\mu\Omega/cm$ FAB Hardness (120 mA EFO) 80 - 90 HV (0.02 N/5 s) Wire Hardness 80 - 90 HV (0.02 N/5 s)

Soft Wire Characteristic 100 95 90 85 80 75 65 60 MaxSoftD Std Copper

Chemical Composition				
Copper	99.99% (min)			
Others				
Floor Life	7 days			
Shelf Life Time	6 month			
Recommended Shielding Gas	Forming Gas (95%N2, 5%H2)			
Bonding Temperature (Leadframe)	200 – 240 °C			

60 - 90 GPa

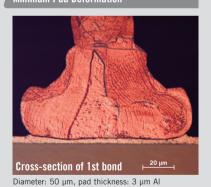


O hours

Excellent Reliability

Elastic Modulus

1000 hours



Bare die HTS @ 175 °C, diameter: 50 $\mu m,$ pad thickness: 3 μm Al

6.25 μm

Heraeus Electronics

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