



**QUALITEK**



**Sn/Ag/Cu ALLOYS  
LEAD FREE  
SOLDER BAR**

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**Description**

Qualitek® offers a variety Tin/Silver/Copper alloys (SAC) lead-free Solder Bar for electronics assembly applications. SAC alloys are considered the electronics industry standard.

**Physical Properties**

**Solder Composition**

Qualitek® Sn/Ag/Cu alloys conform to and exceed the impurity requirements of IPC-J-STD-006C and all other relevant international standards.

<b>Typical Analysis</b>														
	Sn	Ag	Cu	Pb	Sb	Bi	In	As	Fe	Ni	Cd	Al	Zn	Au
<b>LF955-38</b>	Bal	<b>3.6-4.0</b>	<b>0.5-0.9</b>	0.070 Max	0.200 Max	0.100 Max	0.100 Max	0.030 Max	0.020 Max	0.010 Max	0.002 Max	0.005 Max	0.003 Max	0.050 Max
<b>LF965-30</b>	Bal	<b>2.8-3.2</b>	<b>0.3-0.7</b>	0.070 Max	0.200 Max	0.100 Max	0.100 Max	0.030 Max	0.020 Max	0.010 Max	0.002 Max	0.005 Max	0.003 Max	0.050 Max
<b>LF217</b>	Bal	<b>3.8-4.2</b>	<b>0.3-0.7</b>	0.070 Max	0.200 Max	0.100 Max	0.100 Max	0.030 Max	0.020 Max	0.010 Max	0.002 Max	0.005 Max	0.003 Max	0.050 Max
<b>LF99-0307</b>	Bal	<b>0.1-0.5</b>	<b>0.5-0.9</b>	0.070 Max	0.200 Max	0.100 Max	0.100 Max	0.030 Max	0.020 Max	0.010 Max	0.002 Max	0.005 Max	0.003 Max	0.050 Max

	<b>Sn/Ag/Cu</b>
Melting Point, °C	217-221
Melting Point, °C (LF99-0307)	217-220
Hardness, Brinell	15 HB
Coefficient of Thermal Expansion	Pure Sn= 23.5
Tensile Strength, psi	4312
Density, g/cc	7.39
Electrical Resistivity (μohm-cm)	13.0
Electrical Conductivity %IACS	16.6

	<b>Sn/Ag/Cu</b>
Yield Strength, psi	3724
Total Elongation,%	27
Joint Shear Strength, at 0.1mm/min 20 °C	27
Joint Shear Strength, at 0.1mm/min 100 °C	17
Creep Strength, N/mm <sup>2</sup> at 0.1mm/min 20 °C	13.0
Creep Strength, N/mm <sup>2</sup> at 0.1mm/min 100 °C	5
Thermal Conductivity, W/m.K	58.7

**Handling & Storage**

Tin/Silver/Copper Solder bar storage should be in a 65-80 °F environment away from direct heat. We recommend using gloves when handling solder bar directly. Solder bar has an indefinite shelf life.

**Packaging**

Sn/Ag/Cu (SAC) solder bar is available in

Box of 20	2. lb. bars
Q-CHIPS	5 or 50 lb. Containers

**Disposal**

Sn/Ag/Cu solder bar should be disposed of in accordance with federal, state & local authority requirements.

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