



ELECTRONIC SOLDERS

TECHNICAL DATA SHEET

LEAD-FREE SAC ALLOYS SAC305, SAC387, SAC405, SAC0307

DESCRIPTION

SAC Alloys are the leading alloys replacing tin-lead solders for electronic assembly applications. These alloys have proven to perform well in surface mount, wave soldering, and hand soldering applications. SAC Alloys may be used with existing equipment, processes, coatings, and flux chemistries. SAC Alloys are available in bar, cored wire, solid wire, foil, preforms, powder, and no-clean, water soluble and RMA solder pastes.

SAC ALLOYS	TIN	SILVER	COPPER
SAC305	96.50%	3.00%	0.50%
SAC387	95.50%	3.80%	0.70%
SAC405	95.50%	4.00%	0.50%
SAC0307	99.00%	0.30%	0.70%

FEATURES

- Excellent resistance
- Excellent solder joint reliability
- Low melting point for a PB-Free alloy (217°-218°C)
- Compatible with most flux type

TYPICAL IMPURITY LEVELS IN PERCENT

Al: <0.001	Au: <0.001	Cd: <0.001	Fe: 0.01	In: <0.005
As: <0.01	Bi: 0.01	Zn: <0.001	Ni: <0.003	Pb: <0.03

FLUX COMPATIBILITY

SAC Alloys are compatible with most major electronic grade fluxes on the market today, and are available in paste and wire form in no-clean, water soluble and rosin chemistries.

TEMPERATURE REQUIREMENTS

APPLICATION	RECOMMENDED TEMPERATURE
REFLOW SOLDERING	PEAK TEMPERATURE 235°-245°C (455°-473° F)
WAVE SOLDERING	POT TEMPERATURE OF 265°-270°C (520°-530°F)
HAND SOLDERING	TIP TEMPERATURE OF 370°-425°C (700°-800°F)

STORAGE & SHELF-LIFE

When stored properly these alloys have no limited shelf-life. Surface oxidation is cosmetic and will not impede product performance.

SAFETY

Use with adequate ventilation and proper personal protective equipment. Refer to the Safety Data Sheet for any specific emergency information. Do not dispose of any hazardous materials in non-approved containers.

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