ASAHI SOLDER
Connecting The World

Singapore Asahi Chemical & Solder Industries Pte Ltd

Asahi Products-Alloy

		Viromet Series		SCS Series			SAC Series			SnPb			Other Lead Free				
		V347	V349	SCS7	SCS705	SCS7H	SAC305	SACB1053	SAC0307	Sn63Pb37	Sn60Pb40	Sn62Pb36Ag2	SnCu0.7	SnCu0.7H	SnCu3.0	SnCu4.0	SnAg3.5
Properties	**Physical Properties**																
	Solidus (°C)	202	205	227	218	227	217	211	217	183	183	179	227	227	227	227	221
	Liquidus (°C)	207	210	227	225	227	220	221	229	183	191	189	227	227	322	353	221
	Density (g/cm³)	7.40	7.40	7.30	7.32	7.30	7.36	7.39	7.30	8.42	8.50	8.50	7.31	7.31	7.34	7.35	7.38
	Mechanical Properties																
	Tensile Strength (MPa)	76.17	72.03	45.83	36.65	45.83	48.55	72.97	35.56	55.41	56.77	67.25	38.72	38.72	46.74	45.47	54.47
	Yield Strength (MPa)	56.18	52.98	38.78	27.33	38.78	40.81	46.35	25.81	44.64	46.17	56.31	32.29	32.29	37.44	29.27	44.03
	Max. Percent Strain (%)	39.08	49.15	68.16	67.81	68.16	57.85	35.57	73.22	62.15	53.54	55.27	66.53	66.53	48.76	39.05	51.91
	Energy to Yield Point (J)	0.25	0.24	0.20	0.08	0.20	0.12	0.13	0.08	0.17	0.15	0.22	0.10	0.10	0.09	0.08	0.20
	Energy to Break Point (J)	18.39	21.41	18.05	14.48	18.05	16.35	16.58	15.42	16.47	13.08	19.80	15.55	15.55	13.43	11.29	14.53
	Toughness (Mpa)	26.01	30.29	25.54	20.49	25.54	23.13	23.45	21.81	20.07	18.50	28.01	21.99	21.99	19.00	15.98	20.56
Application - Operating Temperature (°C)	**Temperature**																
	Wave (Pot Temperature)	≥245	≥245	≥255	≥255	-	≥255	-	≥255	≥235	≥235	≥235	≥260	-	-	-	≥260
	Reflow (Peak Temperature)	≥220	≥225	≥240	-	-	≥235	≥235	≥240	≥220	≥220	≥220	-	-	-	-	-
	Dipping (Pot Temperature)	≥245	≥245	≥260	≥260	≥350	≥260	-	≥260	≥235	≥235	≥235	≥260	≥350	≥350	≥400	≥260
	Manual (Solder Iron Temperature)	≥300	≥300	≥350	≥350	-	≥350	-	≥350	≥300	≥300	≥300	≥350	-	≥400	-	≥350
	HASL	-	-	≥280	-	-	≥280	-	-	-	-	-	≥280	-	-	-	≥280
Products	Solder Paste	✓	✓	✓			✓	✓	✓	✓	✓	✓					
	Core Wire	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓		✓		✓
	Solid Wire	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
	Solder Bar	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
	BGA Sphere	✓	✓	✓													