






KOBE STEEL's High Performance Copper Alloy Strips for Leadframe.

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Properties		Alloys	 KFC™	 SuperKFC™	 KLF™170	 CAC™5	CAC™92	
		CDA No.	C19210	C19240	C19170	C19040	C72500	
Chemical Compositions		wt% (Nominal)	Cu Rem. Fe 0.1 P 0.03	Cu Rem. Fe 0.3 P 0.1	Cu Rem. Ni 0.7 P 0.13 Fe 0.1 Zn 0.1	Cu Rem. Ni 0.8 P 0.07 Sn 1.2	Cu Rem. Ni 9 Sn 2.3	
Physical Properties (Typical)	Specific Gravity			8.9	8.9	8.9	8.9	
	Coefficient of Thermal Expansion (293 ~ 573K)		×10 ⁻⁶ /K	17.5	17.5	17.5	17.7	16.5
	Thermal Conductivity		W/m·K	364	311	267	145	46
	Electrical Resistivity		nΩ·m	18.2	22.1	26.5	50.7	144
	Electrical Conductivity		%IACS	90	78	65	34	12
	Modulus Elasticity		GPa	125	122	110	130	125
	Poisson's Ratio			0.33	0.33	0.33	0.33	0.33
Mechanical Properties	Temper 1/2H	Tensile Strength	MPa	350~430	/	/	/	410~515
		Elongation	%	4 min				10 min
		Vickers Hardness	MHv: 4.9N	100~130				115~160
	Temper H (SPH: KLF170)	Tensile Strength	MPa	390~470	430~530	580~680	500~590	465~570
		Elongation	%	2 min	3 min	5 min	6 min	9min
		Vickers Hardness	MHv: 4.9N	120~145	130~160	170~210	155~180	140~180
	Temper EH	Tensile Strength	MPa	/	/	/	540~630	515~620
		Elongation	%				5 min	8 min
		Vickers Hardness	MHv: 4.9N				160~195	155~190
	Temper SH	Tensile Strength	MPa	/	/	/	/	550~650
		Elongation	%					7 min
		Vickers Hardness	MHv: 4.9N					170~200
	Temper ESH	Tensile Strength	MPa	/	500~600	610~730	/	600~700
		Elongation	%		3 min	5 min		5 min
		Vickers Hardness	MHv: 4.9N		150~180	180~220		185~210