






KOBE STEEL's High Performance Copper Alloy Strips for Terminals and Connectors.

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Properties		Alloys	 KFC™	KLF™-2	 KLF™-5	 CAC™5	CAC™16	CAC™19	 CAC™60	 CAC™75		
		CDA No.	C19210	-	C50715	C19040	C19800	C19419	C64760	-		
Chemical Compositions		wt% (Nominal)	Cu Rem. Fe 0.1 P 0.03	Cu Rem. Fe 0.1 P 0.03 Sn 0.1	Cu Rem. Fe 0.1 P 0.03 Sn 2	Cu Rem. Ni 0.8 P 0.07 Sn 1.2	Cu Rem. Fe 0.1 P 0.03 Zn 0.4 Sn 0.2 Mg 0.2	Cu Rem. Fe 1.9 Si 0.05 Zn 0.15 Sn 0.1 Mg 0.1	Cu Rem. Ni 1.8 Si 0.4 Zn 1.1 Sn 0.1	Cu Rem. Ni 2.5 Si 0.55 Zn 1 Sn 0.2		
Physical Properties (Typical)		Specific Gravity		8.9	8.9	8.9	8.9	8.9	8.9	8.9		
		Coefficient of Thermal Expansion (293 ~ 573K)	×10 ⁻⁶ /K	17.5	17.5	17.6	17.7 (Temper SP)	17.6	17.9	17.3	17.6	
		Thermal Conductivity	W/m·K	364	318	150	166 (Temper SP)	247	254	197	166	
		Electrical Resistivity	nΩ·m	18.2	21.6	49.3	43.1 (Temper SP)	28.3	27.4	39.2	43.1	
		Electrical Conductivity	%IACS	90	80	35	40 (Temper SP)	61	63	44	40	
		Modulus Elasticity	GPa	125	127	123	130	118	120	127	127	
		Poisson's Ratio		0.33	0.33	0.33	0.33	0.33	0.33	0.33		
Mechanical Properties		Temper 1/4H	Tensile Strength	MPa	295~370	330 min	/	/	/	365~450	/	/
			Elongation	%	15 min	13 min				15 min		
			Vickers Hardness	MHv: 4.9N	85~110	80~120				90~140		
		Temper 1/2H	Tensile Strength	MPa	350~430	/	440~540	/	335~470	/	/	/
			Elongation	%	4 min		8 min		8 min			
			Vickers Hardness	MHv: 4.9N	100~130		140~180		100~150			
		Temper H (H/SP: CAC5)	Tensile Strength	MPa	390~470	390 min	530~640	500~590	450~550	470~580	600~700	700~850
			Elongation	%	2 min	7 min	5 min	7 min	5 min	5 min	10 min	5 min
			Vickers Hardness	MHv: 4.9N	120~145	120~160	160~200	155~185	130~170	140~175	180~220	210~260
		Temper EH (EH/SP: CAC5)	Tensile Strength	MPa	/	/	590 min	540~630	/	/	640~740	/
			Elongation	%			-	5 min			3 min	
			Vickers Hardness	MHv: 4.9N			180 min	165~200			190~230	