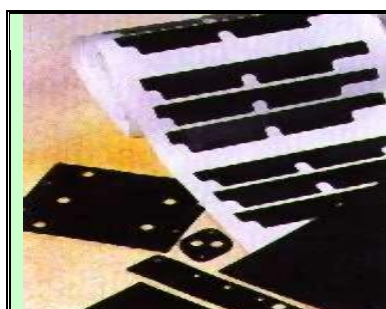


## CM20

	Material	Thermal Impedance °C/W (Area:T03)	Volume Resistivity Wcm	Temperature Range
Property	Compressed Graphite	0.07	0.002	-200 to +500°C
Test Method		ASTM D5470	ASTM D991 (Mod)	



### Description

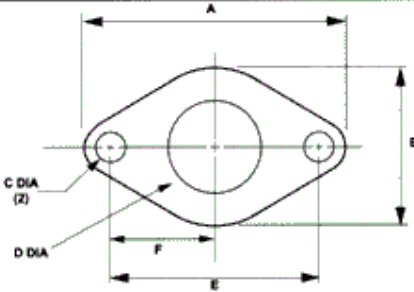
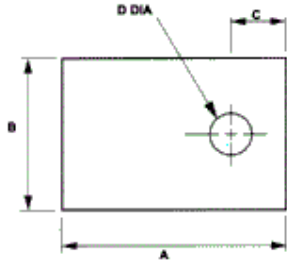
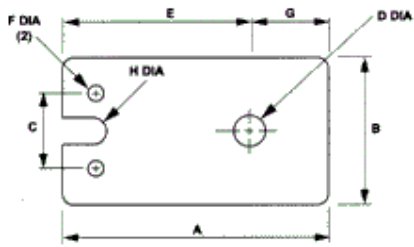
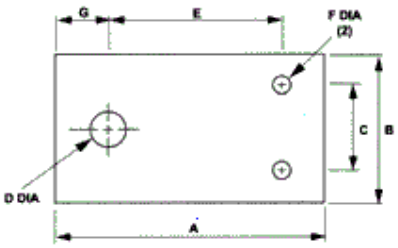
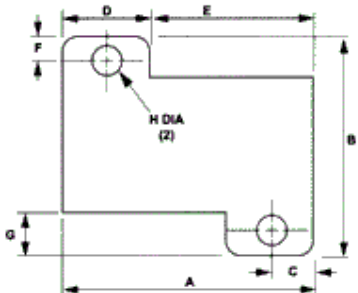
CM20 is a dry alternative to thermal compound. Its composition is 98% graphite and by nature offers both thermal and electrical conductivity. Low thermal resistance means that CM20 can be used in high power applications where maximum heat transfer is essential. High electrical conductivity is a natural property because of the graphite structure. CM20 provides a consistent low resistance path between transistor and heatsink. Contamination is eliminated because CM20 does not outgas or migrate like thermal compounds. It does not shrink or dry out.

Ordering Information	Key Performance Properties
Standard sheet sizes are 300mm x 300mm each. Adhesive backed CM20-AC-30x30 Non Adhesive CM20-NA-30x30  An extensive range of pre-cut profiles is also available, see additional datasheet for details.	Extremely low thermal resistance.
	Fills air gaps between components up to 7% of the pads thickness.
	Remains resistant to cleaning agents, and does not support organic growth.
	No known deterioration over time.
	Easily cut at room temperature into most configurations using steel rule dies or sharp blades.
	Low tooling costs for custom profiles.
	Electrically conductive.

Technical Information	Property	Test Standard
Thickness (mm)	0.200 ± 0.02	
Thermal Conductivity Wm <sup>-1</sup> K <sup>-1</sup>	3.85	MIL-I-49456A
Thermal resistance per cm <sup>2</sup>	0.45°C/W	
Hardness	84 ± 5	Shore Micro
Tear Resistance kN/m	8	ASTM D624
Tensile Strength MPa	3.6	ASTM D412
Dielectric Constant 1000Hz	N/A	ASTM D150
Elongation %	1	ASTM D412
Colour	Dark grey	

PAD DESCRIPTION	PART NUMBER SUFFIX	DIMENSIONS										PAD OUTLINES	MATERIALS AVAILABLE
		A	B	C	D	E	F	G	H	J			
TO-3	-010	40.0	26.5	3.5	2.0	30.0	11.0	1.8	-	-		A,B,C,D	
	-021	40.0	26.5	3.5	3.5	30.0	11.0	1.8	-	-			
	-032	40.5	28.0	3.9	1.5	30.0	11.0	1.8	-	-			
	-036	42.0	27.0	3.5	1.5	30.0	11.0	1.8	-	-			
	-043	42.0	29.0	3.0	1.5	30.0	11.0	1.8	-	-			
	-048	42.0	29.0	3.5	1.2	30.0	11.0	1.8	-	-			
	-054	42.0	29.0	3.5	2.3	30.0	11.0	1.8	-	-			
	-057	45.0	31.7	3.5	1.2	30.0	11.0	1.8	-	-			
	-063	52.5	39.6	3.0	1.5	30.0	11.0	1.8	-	-			
	-065	42.0	29.0	3.8	1.5	30.0	11.0	1.8	-	-			
	-076	43.0	30.0	3.9	1.5	30.0	11.0	1.8	-	-			
	-087	45.0	31.7	3.5	2.3	30.0	11.0	1.8	-	-			
-098	45.0	31.7	4.1	2.3	30.0	11.0	1.8	-	-				
TO-3	-213	A	B	C	D	E	F	G	H	J		F	
		42	29	3	7	30	11	2	-	-			
TO-3 TRIAC	-504	A	B	C	D	E	F	G	H	J		A,B,C, D,FG	
		42.0	29.0	4.0	-	30.0	-	-	-	-			
TO-3	-079	A	B	C	D	E	F	G	H	J		A,B,D	
		42.0	29.0	3.5	2.4	30.0	11.0	10.0	4.0	18.2			
TO-3	-439 -543	A	B	C	D	E	F	G	H	J		A,B,D	
		39.0	26.5	4.0	2.0	30.0	12.0	-	-	-			
		39.0	26.5	3.9	1.6	30.0	12.0	-	-	-			



PAD DESCRIPTION	PART NUMBER SUFFIX	DIMENSIONS									PAD OUTLINES	MATERIALS AVAILABLE
		A	B	C	D	E	F	G	H	J		
TO-66	-327	34.0	20.0	3.5	10.0	24.0	12.0	-	-	-		A,B,C,D,G
PLASTIC POWER		A	B	C	D	E	F	G	H	J		A,B,C,D,FG
TO-126	-457	11.0	8.0	3.5	2.3	-	-	-	-	-		
TO-126	-568	11.0	8.0	3.5	3.0	-	-	-	-	-		
	-679	13.0	10.0	4.3	3.0	-	-	-	-	-		
TO-202	-890	15.5	14.0	6.2	3.0	-	-	-	-	-		
	-131	17.5	14.0	5.5	3.0	-	-	-	-	-		
	-314	18.0	12.0	5.0	3.0	-	-	-	-	-		
	-242	18.0	13.0	4.0	3.5	-	-	-	-	-		
	-278	19.0	10.5	5.7	4.0	-	-	-	-	-		
TO-220	-353	19.0	13.0	4.7	3.5	-	-	-	-	-		
TO-220	-464	19.0	13.0	4.7	3.0	-	-	-	-	-		
	-303	19.0	15.0	6.0	3.8	-	-	-	-	-		
	-575	19.0	15.0	6.0	3.0	-	-	-	-	-		
	-289	19.0	20.5	3.8	4.0	-	-	-	-	-		
	-686	22.0	14.0	5.5	3.0	-	-	-	-	-		
	-797	22.0	16.0	5.8	2.3	-	-	-	-	-		
	-305	22.0	17.0	5.5	3.6	-	-	-	-	-		
	-308	22.0	19.0	5.0	4.0	-	-	-	-	-		
PLASTIC POWER	-910	A	B	C	D	E	F	G	H	J		A,B,C,D
		25.0	12.5	5.0	3.5	16.0	1.5	5.5	0.8	-		
PLASTIC POWER		A	B	C	D	E	F	G	H	J		A,B,C,D
	-388	23.0	13.0	5.0	3.0	14.0	1.5	7.0	-	-		
	-399	25.0	19.0	11.0	4.0	17.0	2.5	5.5	-	-		
POWER RESISTOR		A	B	C	D	E	F	G	H	J		A,B,C,D,FG
RH-5	-444	18.5	19.5	3.5	7.0	11.3	3.5	3.9	2.3	-		
RH-10	-555	20.4	22.6	3.2	6.3	13.9	3.3	4.8	3.0	-		
RH-25	-666	29.0	30.0	5.8	10.7	18.4	4.8	6.8	3.7	-		
RH-25	-777	30.1	30.6	5.9	11.9	18.2	5.3	6.7	3.5	-		
RH-50	-888	50.0	31.3	5.0	10.2	39.8	3.3	6.6	3.3	-		
RH-50	-999	53.1	32.1	6.7	13.4	39.7	5.3	6.4	3.5	-		



PAD DESCRIPTION	PART NUMBER SUFFIX	DIMENSIONS										PAD OUTLINES	MATERIALS AVAILABLE
		A	B	C	D	E	F	G	H	J			
TIP-36 TO-3P TO-3P	-124	22.0	17.0	17.0	3.5	5.0	-	-	-	-		A,B,C, D,FG	
	-235	25.0	20.0	18.0	3.5	5.0	-	-	-	-			
	-346	32.0	20.0	25.0	3.5	5.0	-	-	-	-			
PLASTIC POWER  TO-3P, TO-247, TO-218, SOT93	-403	24.0	19.0	7.0	3.3	-	-	-	-	-		A,B,C, D,FG	
	-872	24.0	19.0	7.0	3.8	-	-	-	-	-			
	-316	25.5	19.0	7.6	3.5	-	-	-	-	-			
	-329	29.0	16.0	5.0	3.7	-	-	-	-	-			
	-752	30.0	20.0	4.5	3.0	-	-	-	-	-			
	-334	35.0	25.0	9.0	3.0	-	-	-	-	-			
	-982	36.0	21.0	9.5	3.7	-	-	-	-	-			
TO-3P	-375 -302	A	B	C	D	E	F	G	H	J		A,B,C, D,FG	
		30.0	18.0	5.0	20.0	9.0	3.0	-	-	-			-
		36.0	18.0	5.8	24.4	9.0	3.0	-	-	-			
MULTIWATT	-620 -617	A	B	C	D	E	F	G	H	J		A,B,C, D,FG	
		22.0	25.0	11.0	2.5	6.0	3.0	-	-	-			
		26.0	23.0	13.0	2.5	6.0	3.6	-	-	-			
SIP	-937	A	B	C	D	E	F	G	H	J		A,B,C, D,FG	
		37.0	22.0	16.0	6.3	24.4	4.3	3.0	-	-			



PAD DESCRIPTION	PART NUMBER SUFFIX	DIMENSIONS										PAD OUTLINES	MATERIALS AVAILABLE
		A	B	C	D	E	F	G	H	J			
TIP CLIP MOUNT	-415	22.0	17.0	17.0	-	5.0	-	-	-	-	-		A,B,C,D, E,F,G,H
	-807	25.0	20.0	18.0	-	5.0	-	-	-	-			
	-908	32.0	20.0	25.0	-	5.0	-	-	-	-			
KOOL-PAD CLIPS	-843 -855	A	B	C	D	E	F	G	H	J		A,B,C, D,F,G	
		32.0	20.0	6.5	3.0	-	-	-	-	-			
		42.0	25.0	8.0	4.0	-	-	-	-	-			

THERMAFLEX SHEETS		PART NUMBERS		THERMAFLEX SHEETS		PART NUMBERS	
		THER-05NA-8 x 30 THER-05AC-8 x 30 THER-07NA-8 x 30 THER-07AC-8 x 30	THER-10NA-15 x 30 THER-10AC-15 x 30 THER-15NA-15 x 30 THER-15AC-15 x 30 THER-20NA-15 x 30 THER-20AC-15 x 30				

KOOL-PAD SHEETS		PART NUMBERS				CM20 SHEETS		PART NUMBERS	
		K177-NA-30 x 30 K228-NA-30 x 30 K230-NA-30 x 30 K200-NA-30 x 30 K381-NA-30 x 30 PK17-NA-30 x 30 PK23-NA-30 x 30	K177-AC-30 x 30 K228-AC-30 x 30 K230-AC-30 x 30 K200-AC-30 x 30 KK071-AC-30 x 30 KA150-2AC-30 x 30	CM20-NA-30 x 30 CM20-AC-30 x 30					

DIMENSIONS ± 2mm

KOOL-PAD ROLLS CUT AT ANY WIDTH	
	Minimum length 100 metres Width (Specify)-15mm upwards Width Tolerance ±1.5mm Ordering Example: K177-NA-XX XX=Width