Q-Pad II®, Q-Pad 3®

Grease Replacement Materials without Electrical Isolation

Q-Pad II® Eliminates Grease

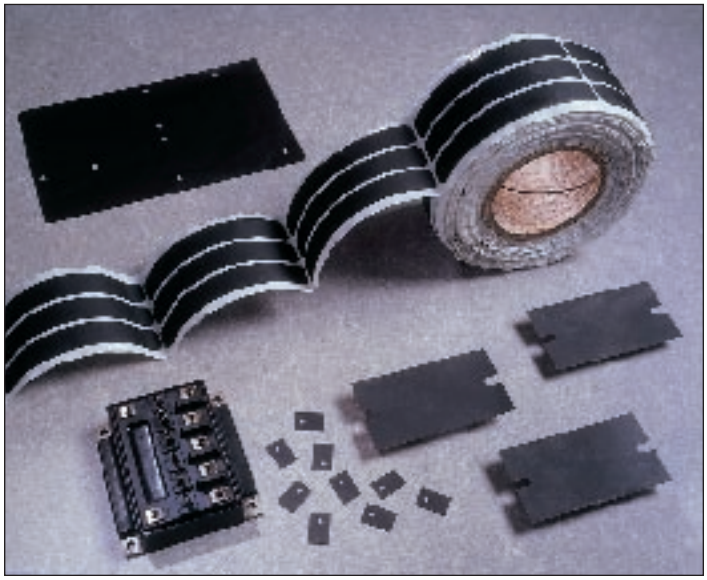
Q-Pad II is a composite of .0015" aluminum foil coated both sides with .0025" thick thermally/electrically conductive Sil-Pad rubber. It is designed for those applications where maximum heat transfer is needed and electrical insulation is not required. Q-Pad II is the ideal thermal interface material to replace messy thermal grease compounds.

Q-Pad II eliminates problems associated with grease such as contamination of reflow solder or cleaning operations. Q-Pad II can be used prior to these operations unlike grease. Q-Pad II also eliminates dust collection which can cause possible surface shorting or heat buildup. Some applications where the material is typically used include:

- Between a transistor and a heat sink.
- Between two large surfaces such as an L-Bracket and the chassis of an assembly.
- Between a heat sink and a chassis.
- Under electrically isolated power modules or devices such as resistors, transformers and solid state relays.

Q-PAD 3®

The new Bergquist Q-Pad 3 eliminates problems associated with thermal grease such as contamination of electronic assemblies and reflow solder baths. Q-Pad 3 may be installed prior to soldering and cleaning, without worry. When



clamped between two surfaces, the elastomer conforms to surface textures thereby creating an air free interface between heat generating components and heat sinks.

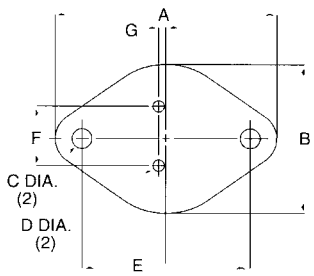
Fiberglass reinforcement enables Q-Pad 3 to withstand processing stresses without losing physical integrity. Q-Pad II and 3 are both available with or without adhesive.

Die-Cut parts, Rolls and Sheets

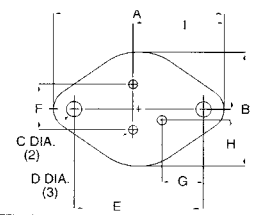
Q-Pad II and Q-Pad 3 are available in die-cut parts and sheets (6" x 6" min., 6" x 12", 8" x 8", 10" x 10" and 12" x 12") and roll form.

Physical Properties	Q-PAD II	Q-PAD 3	Test Method
Color	Black	Black	Visual
Thickness Inches (mm)	.006/.0065 w/ac ±.001 .152 ±.025	.005/.0055 (w/ac) (.15)	ASTM D374 ASTM D374
Service Temperature °C	180 wo/ac 150 w/ac		--
Thermal Properties	**Q-PAD II**	**Q-PAD 3**	**Test Method**
Thermal Resistance, °C-in²/W Metric (cm²-K/w)	0.10 w/o ac 0.20 w/ac .65 w/o ac 1.3 w/ac	0.10 w/o ac 0.14 w/ac .65 w/o ac 0.9 w/ac	
Thermal Conductivity, W/m-K	2.5 wo/ac 1.3 w/ac	2.0 w/o ac 1.6 w/ac	ASTM D5470
Electrical Properties	**Q-PAD II**	**Q-PAD 3**	**Test Method**
Volume Resistivity, Ohm Metre	1.0×10^{2} w/o ac 10^{3} w/ac	10^{-1} w/o ac 10^{1} w/ac	ASTM D4496

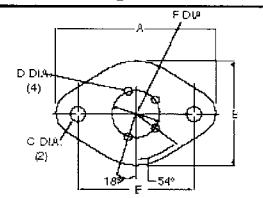
Configurations Standard des SIL-PAD®



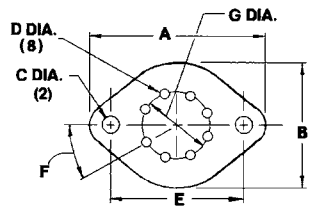
Boiter TO-3	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"
					en mm			
	-03	39.70	26.67	3.56	2.03	30.15	10.92	1.83
	-18	39.70	26.67	3.56	3.56	30.15	10.92	1.83
	-23	40.46	26.67	3.96	1.57	30.15	10.92	1.83
	-29	27.05	27.05	3.56	1.17	30.15	10.92	1.83
	-04	41.91	28.96	3.10	1.57	30.15	10.92	1.83
	-05	41.91	28.96	3.56	2.36	30.15	10.92	1.83
	-06	41.91	28.96	4.19	1.57	30.15	10.92	1.83
	-17	41.91	28.96	3.56	1.17	30.15	10.92	1.83
	-59 sans patte	41.91	28.96	4.19		30.15		
	-24	43.18	30.15	3.96	1.57	30.15	10.92	1.83
	-02	45.21	31.75	3.56	2.36	30.15	10.92	1.83
	-07	45.21	31.75	4.19	2.39	30.15	10.92	1.83
	-15	45.21	31.75	3.56	1.17	30.15	10.92	1.83
	-16	52.58	39.62	3.10	1.57	30.15	10.92	1.83



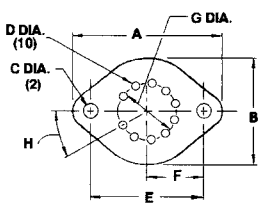
TO-3 3 cond.	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"
	-92	41.91	28.96	3.56	2.36	30.15	10.92	10.16	3.94	18.24



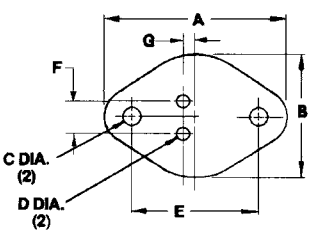
TO-3 4 cond.	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
	-86	1.560	26.67	3.96	2.03	29.72	11.94	18°	59°
	-87	1.563	26.67	3.96	1.60	30.15	11.94	18°	59°



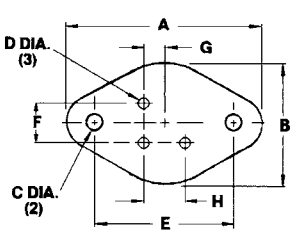
TO-3 8 cond.	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"
	-88	42.04	30.15	3.96	1.52	30.15	40°	12.7



TO-3 10 cond.	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
	-91	41.91	28.96	4.19	1.02	30.15	15.06	12.7	32.7°

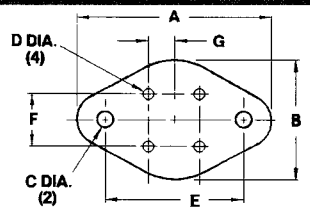


Boiter TO-66	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"
	-30	31.75	17.78	3.56	1.57	24.38	5.08	2.54
	-11	33.32	19.35	3.56	1.57	24.38	5.08	2.54
	-31	33.32	19.35	3.56	1.57	24.38	5.08	2.54
	-10	36.58	25.40	3.56	1.90	24.38	5.08	2.54

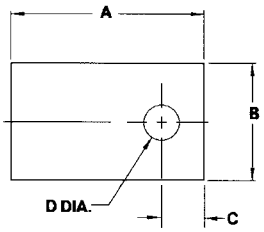


TO-66 3 cond.	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"I"
	-85	32.38	19.05	3.96	2.54	24.38	5.08	2.54	5.08

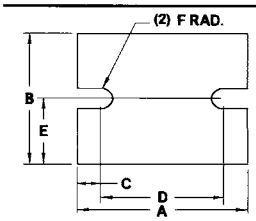
Configurations Standard des SIL-PAD®



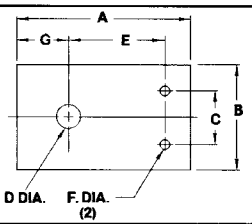
TO-66 4 cond.	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"
	-84	33.32	19.35	3.57	1.57	24.38	5.08	2.54



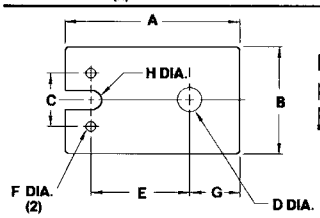
Composant puissance plastique	Suffixe du n° d'article	"A"	"B"	"C"	"D"		Suffixe du n° d'article	"A"	"B"	"C"	"D"
TO-126	-50	11.10	7.92	3.56	2.36	Divers	-62	19.05	15.24	6.10	3.81
TO-126	-60	11.10	7.92	3.56	3.10	Divers	-63	19.05	15.24	6.10	2.92
Divers	-64	12.7	9.78	4.32	3.05	Divers	-56	21.72	14.27	5.54	3.18
TO-220	-55	15.49	14.22	6.22	3.18	Divers	.52	21.72	16.00	5.84	2.36
Divers	-51	17.45	14.28	5.54	3.18	TO-218	.90	21.84	18.80	5.08	4.06
Divers	-35	18.03	12.7	4.06	3.58	Divers	-68	28.58	15.88	5.08	3.71
Divers	-61	19.05	.410	5.72	3.96	Divers	-70	13.56	20.57	9.02	3.71
TO-220(montage à clip)	-43	19.05	12.7			Divers	-102	22.00	16.51	5.51	3.61
TO-220	-54	19.05	12.7	4.75	3.18	Divers	-103	19.05	20.32	3.81	4.06
TO-220	-58	19.05	12.7	4.75	3.73	TO-3P	-104	1.000	19.05	7.62	3.56



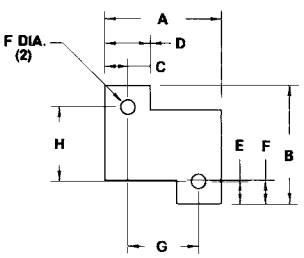
Module de Puissance	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"
	-67	38.1	22.86	3.81	30.48	11.43	1.90
	-101	63.5	5.08	8.74	46.02	25.4	3.96



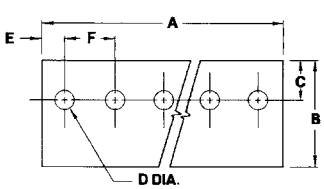
Module de puissance plastique	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"
	-57	23.11	12.7	5.08	3.18	14.73	1.17	6.73
	-89	24.97	19.05	10.97	3.96	16.89	2.56	5.51



Module de puissance plastique	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
	-66	25.4	12.7	5.08	3.58	15.90	1.17	5.56	0.81

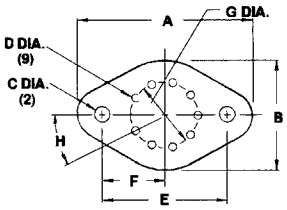


Résistances de puissance	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"
RH-25	-94	14.75	31.75	5.94	11.91	5.38	3.96	18.26	19.84	3.56
RH-50	-95	22.36	32.13	6.73	13.46	5.33	6.48	39.70	21.46	3.56
RH-5	-96	18.42	19.58	3.56	7.11	3.56	3.96	11.30	12.47	2.36
RH-10	-97	20.48	22.61	3.22	6.35	3.30	4.83	14.00	16.00	3.07
RH-25	-98	29.21	29.97	5.87	10.80	4.83	6.86	17.48	20.32	3.73
RH-50	-99	1.965	31.39	5.03	10.26	3.35	6.68	39.85	24.69	3.30

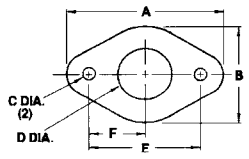


TO-220 Multiples	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	Trous
2 éléments	-34	25.40	19.05	4.75	3.18	6.35	12.7	2
3 éléments	-36	38.10	19.05	4.75	3.18	6.35	12.7	3
	-37	50.80	19.05	4.75	3.18	6.35	12.7	4
	-38	63.50	19.05	4.75	3.18	6.35	12.7	5
	-39	76.20	19.05	4.75	3.18	6.35	12.7	6
	-40	88.90	19.05	4.75	3.18	6.35	12.7	7
	-41	101.60	19.05	4.75	3.18	6.35	12.7	8

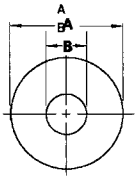
Configurations Standard des SIL-PAD®



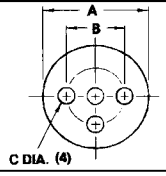
TO-66 9 cond.	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
					en mm				
	-83	36.58	25.40	3.56	1.40	24.38	12.19	.325	36°



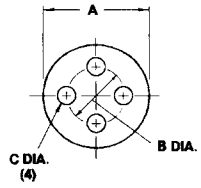
TO-66 Multi-cond.	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"
	-93	34.29	20.32	3.56	10.16	24.38	12.19



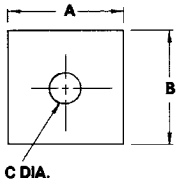
Composant puissance plastique	Suffixe du n° d'article	"A"	"B"		Suffixe du n° d'article	"A"	"B"
Divers	-75	9.14	6.60	Divers	-27	20.62	2.92
Divers	-19	12.95	3.56	Divers	-27	20.62	2.92
DO-4	-20	12.95	5.08	DO-8	-78	22.22	7.95
Divers	-82	13.00	4.09	Divers	-28	25.40	3.56
DO-4(surdimensionné)	-22	15.88	5.08	DO-5(surdimensionné)	-25	25.40	6.60
Divers	-76	19.05	3.18	Divers	-79	29.97	13.08
Divers	-77	20.32	4.82	Divers	-80	31.75	9.65
DO-5	-21	20.32	6.60	Divers	-81	38.10	5.08



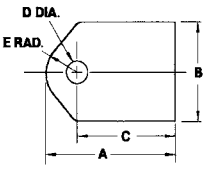
TO-36	Suffixe du n° d'article	"A"	"B"	"C"	"D"
	-08	27.00	17.53	4.83	4.83



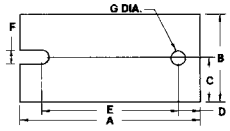
Petit module de puissance	Suffixe du n° d'article	"A"	"B"	"C"
TO-18, 3 trous	-12	6.35	2.54	0.91
TO-18, 4 trous	-13	6.35	2.54	0.91
TO-5, 3 trous	-09	9.14	5.08	1.02
TO-5, 4 trous	-33	9.14	5.08	1.02
TO-5, 3 trous	-44	9.91	5.08	1.02
TO-5, 4 trous	-45	9.91	5.08	1.02



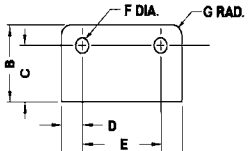
Redresseur	Suffixe du n° d'article	"A"	"B"	"C"
	-48	25.40	25.40	4.75
	-47	28.58	28.58	3.56
	-46	31.75	31.75	5.08



Ensembles TIP	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"
TIP-36 plastique	-53	21.97	16.51	16.51	3.56	5.21
Montage à clip	-42	24.99	19.99			5.21
Clip plastique	-73	24.99	19.99	17.98	3.61	5.21



Module de Puissance	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"
	-100	63.75	32.00	16.00	7.75	48.26	5.21	5.21



Ensemble SIP	Suffixe du n° d'article	"A"	"B"	"C"	"D"	"E"	"F"	"G"
	-105	36.83	2.28	15.54	6.22	24.38	4.32	3.05