

PGA84L

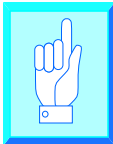
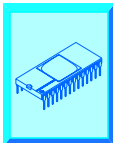
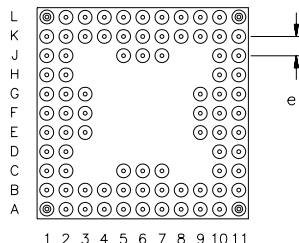
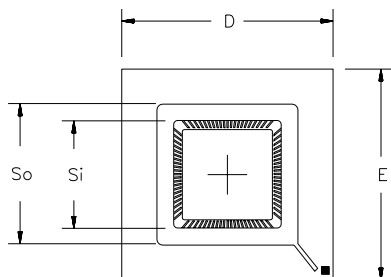
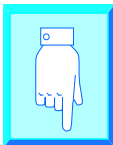


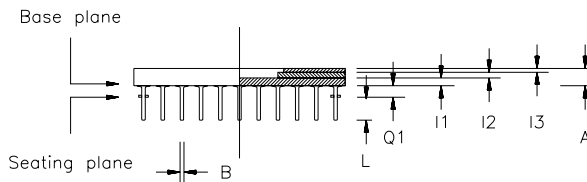
Table of Contents



Exit



A1



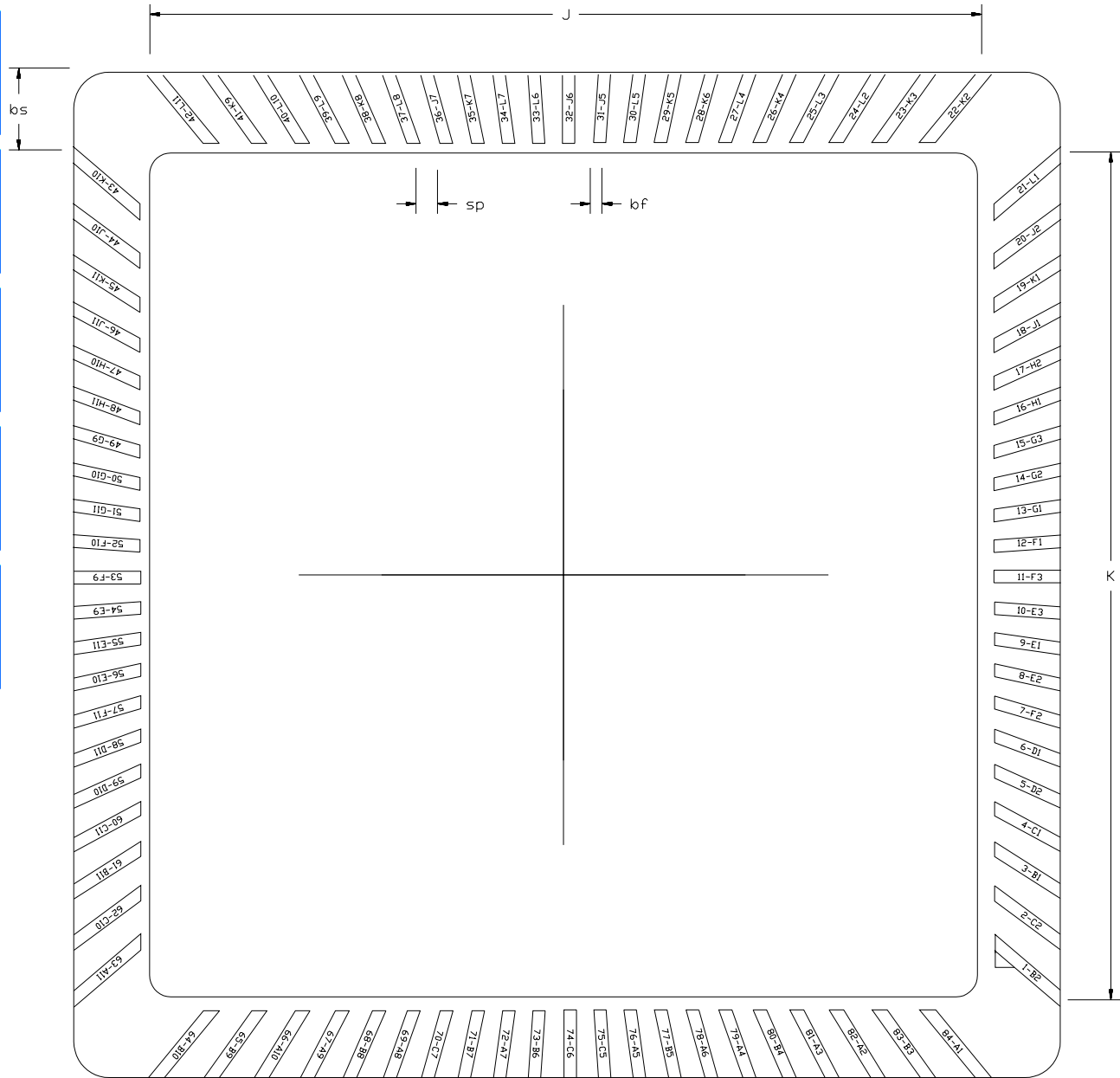
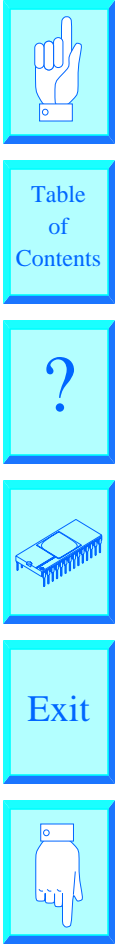
Dimension	Designation	Nominal	Units/Material
A	Base plane height	0.080	in
Q1	Seating-Base plane	0.050	in
D,E	Overall length	1.100	in (square)
e1	Lead pitch	0.100	in
L	Pin length	0.130	in
N	Pin count	84	
I1	Layer 1 thickness	0.040	in (ceramic)
I2	Layer 2 thickness	0.020	in (ceramic)
I3	Layer 3 thickness	0.020	in (ceramic)
Package	PGA84L	See appendix B	

Scale: 1X

Dimension	Designation	Nominal	Units/Material
Si	Seal ring ID	0.574	in (square)
So	Seal ring OD	0.734	in (square)
Lid	F0720A	See appendix A	

NOTE: ROTATE DIAGRAM 90 DEGREES COUNTERCLOCKWISE

PGA84L



A1

Dimension	Designation	Nominal	Units/Material
J,K	Cavity length/width	0.470	in (square)
bs	Bond shelf width	0.045	in
sp	Bond finger spacing	0.012	in
bf	Bondfinger width	0.007	in

View of bottom of package

L	21	24	25	27	30	33	34	37	39	40	42
K	19	22	23	26	29	28	35	38	41	43	45
J	18	20			31	32	36			44	46
H	16	17								47	48
G	13	14	15						49	50	51
F	12	7	11						53	52	57
E	9	8	10						54	56	55
D	6	5							59	58	
C	4	2		75	74	70			62	60	
B	3	1	83	80	77	73	71	68	65	64	61
A	84	82	81	79	76	78	72	69	67	66	63
	1	2	3	4	5	6	7	8	9	10	11

PGA84L

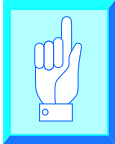
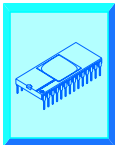


Table
of
Contents

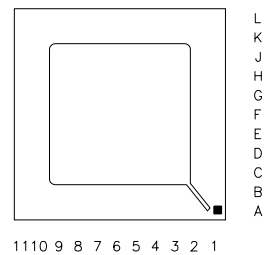


Exit



L	21	24	25	27	30	33	34	37	39	40	42
K	19	22	23	26	29	28	35	38	41	43	45
J	18	20			31	32	36			44	46
H	16	17								47	48
G	13	14	15						49	50	51
F	12	7	11						53	52	57
E	9	8	10						54	56	55
D	6	5								59	58
C	4	2			75	74	70			62	60
B	3	1	83	80	77	73	71	68	65	64	61
A	84	82	81	79	76	78	72	69	67	66	63
	1	2	3	4	5	6	7	8	9	10	11

Pin Side view
of package



PGA84L

Bond Finger - Pin Interconnect Chart

Bond finger	Pin	Bond finger	Pin	Bond finger	Pin	Bond finger	Pin	Bond finger	Pin	Bond finger	Pin
1	B2	17	H2	33	L6	49	G9	65	B9	81	A3
2	C2	18	J1	34	L7	50	G10	66	A10	82	A2
3	B1	19	K1	35	K7	51	G11	67	A9	83	B3
4	C1	20	J2	36	J7	52	F10	68	B8	84	A1
5	D2	21	L1	37	L8	53	F9	69	A8		
6	D1	22	K2	38	K8	54	E9	70	C7		
7	F2	23	K3	39	L9	55	E11	71	B7		
8	E2	24	L2	40	L10	56	E10	72	A7		
9	E1	25	L3	41	K9	57	F11	73	B6		
10	E3	26	K4	42	L11	58	D11	74	C6		
11	F3	27	L4	43	K10	59	D10	75	C5		
12	F1	28	K6	44	J10	60	C11	76	A5		
13	G1	29	K5	45	K11	61	B11	77	B5		
14	G2	30	L5	46	J11	62	C10	78	A6		
15	G3	31	J5	47	H10	63	A11	79	A4		
16	H1	32	J6	48	H11	64	B10	80	B4		

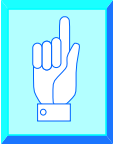
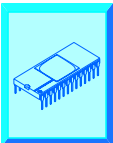


Table
of
Contents

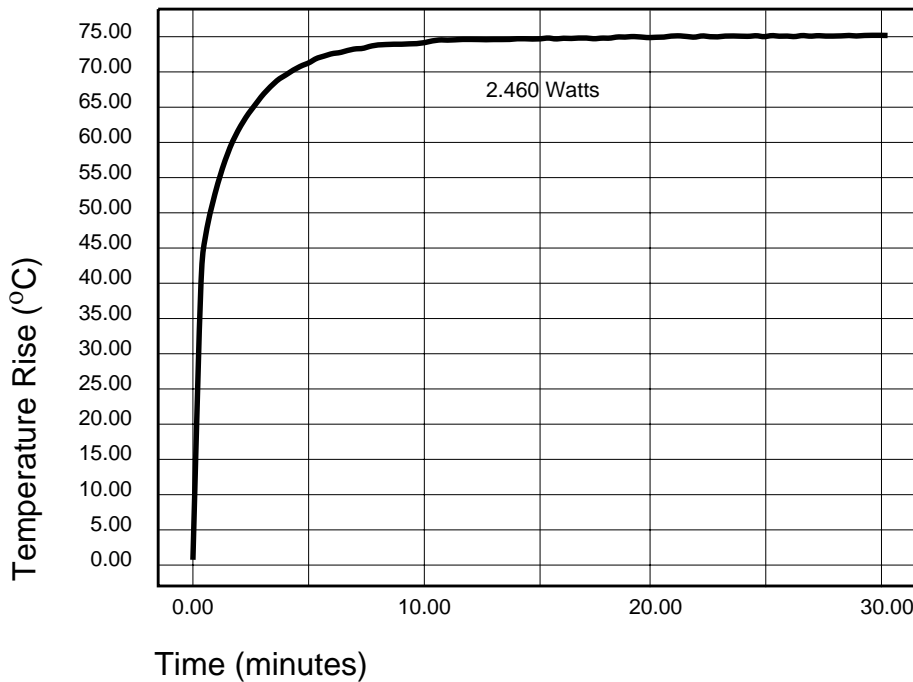


Exit



PGA84L

Transient Thermal Response



Temperature - Power Relationship

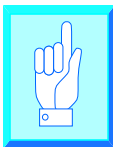
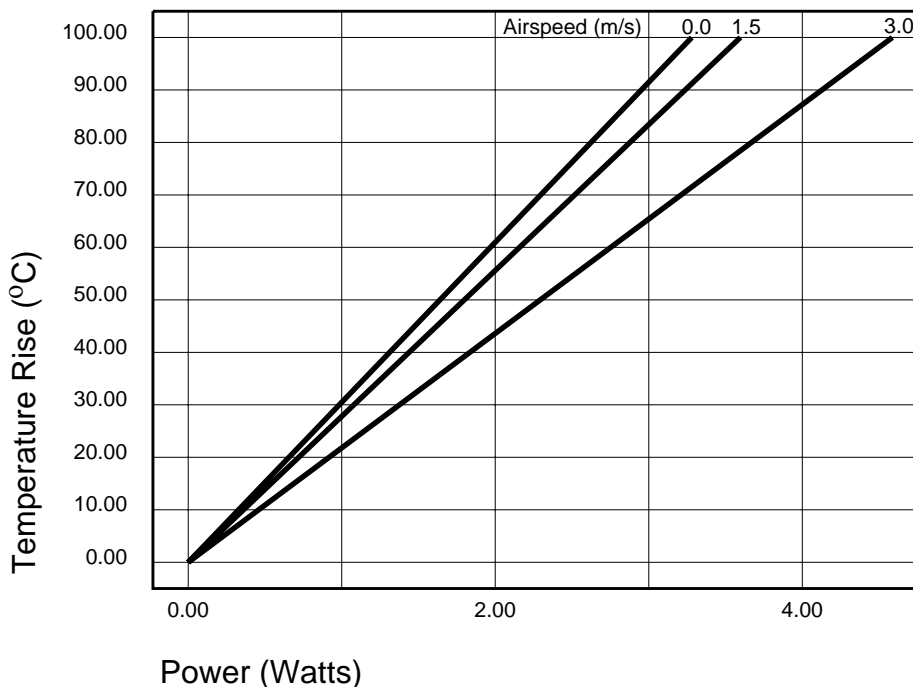
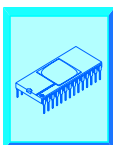


Table of Contents



Exit



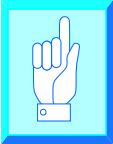
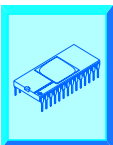


Table of Contents

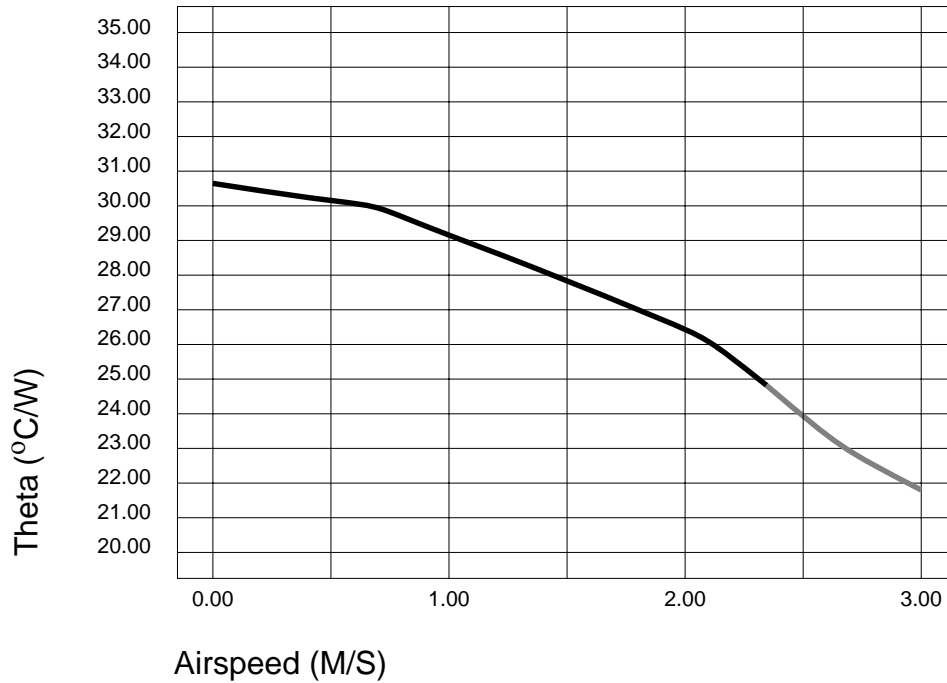


Exit



PGA84L

Thermal Resistance

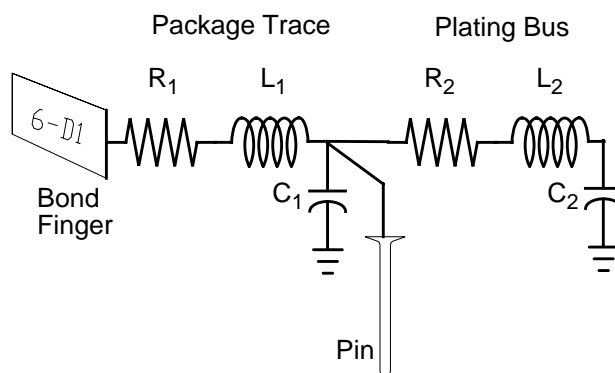


Thermal test device:	"TOAST"	Measured	
Die size:	0.153" x 0.133"	Predicted	
Die Attach material:	Abelstick 84LMI silver filled epoxy		

PGA84L

Electrical Characteristics

Bond Finger	$R_1 \Omega$	$L_1 \text{ nH}$	$C_1 \text{ pF}$	$R_2 \Omega$	$L_2 \text{ nH}$	$C_2 \text{ pF}$	$t_{of}(\text{ps})$
7,28,52,73	0.0666	2.21	1.07	0.189	3.02	0.846	47.9
11,32,53,74	0.0873	2.87	1.31	0.291	4.65	1.3	60.9
5,17,26,38,47,59,68,80	0.0952	3.08	1.34	0.189	3.02	0.846	63.9
8,14,29,35,50,56,71,77	0.101	3.31	1.51	0.189	3.02	0.846	69.9
10,15,31,36,49,54,70,75	0.106	3.45	1.51	0.291	4.65	1.3	71.9
2,20,23,41,44,62,65,83	0.107	3.48	1.55	0.189	3.02	0.846	72.9
12,33,57,78	0.122	3.96	1.76	0.0433	0.693	0.194	82.9
9,13,30,34,51,55,72,76	0.102	3.77	1.89	0.0433	0.693	0.194	83.9
6,16,27,37,48,58,69,79	0.102	3.91	2.03	0.0433	0.693	0.194	88.9
4,18,25,39,46,60,67,81	0.123	4.51	2.18	0.0433	0.693	0.194	98.9
1,22,43,64	0.159	5.15	2.19	0.189	3.02	0.846	106
3,19,24,40,45,61,66,82	0.129	4.83	2.48	0.0433	0.693	0.194	109
21,42,63,84	0.168	5.47	2.46	0.0433	0.693	0.194	116



PGA84L

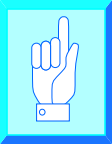
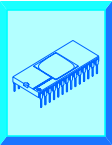


Table of Contents



Exit



Cross-Talk

Trace	Low Z	High Z
Short	Data In Progress	
Long		

% of adjacent signal coupled to nearest neighbor with 1ns rise time

Signal degradation

Trace	Input Risetime (ps)	Output Risetime (ps)
Short	Data In Progress	
Long		

output risetime for a specific input risetime