



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



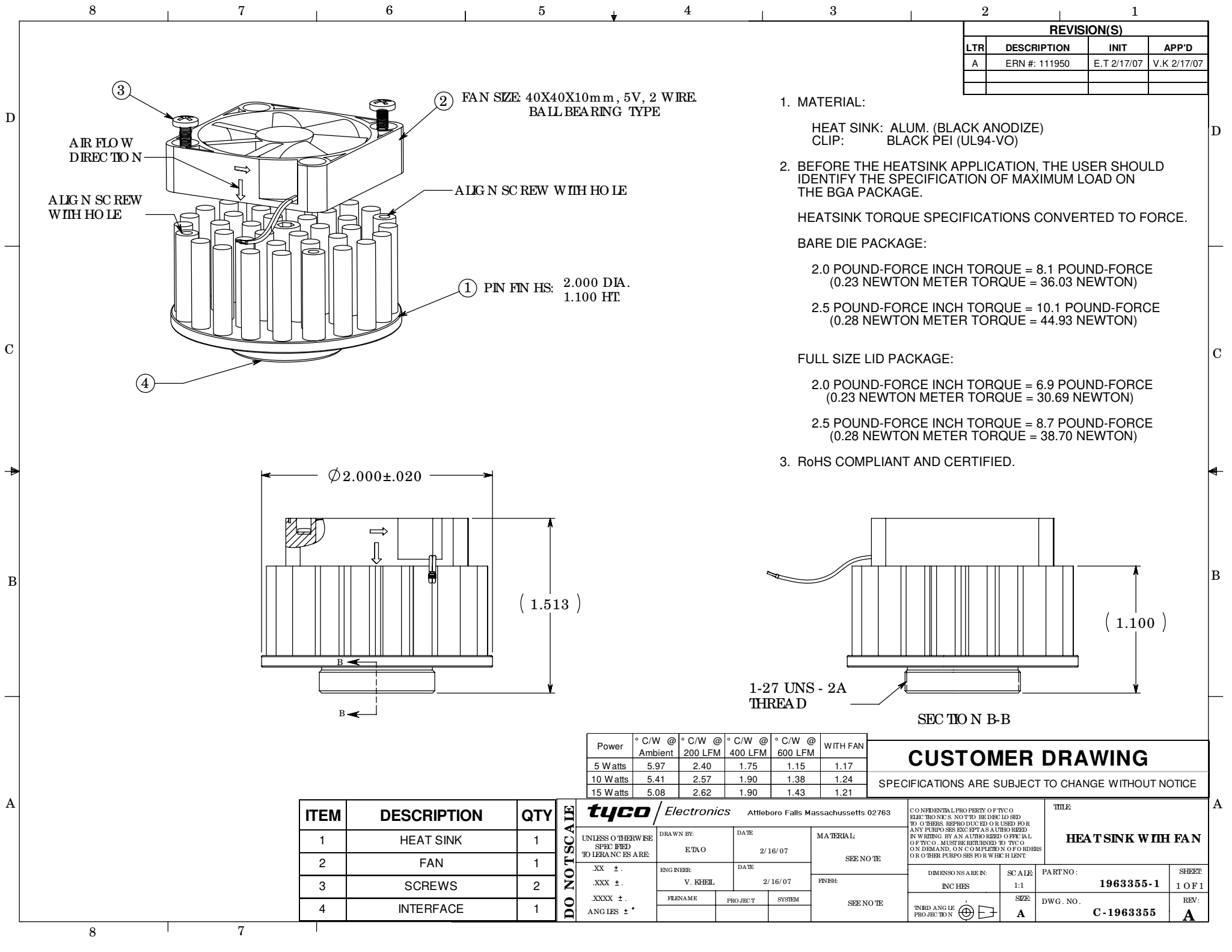
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REVISION(S)			
LTR	DESCRIPTION	INIT	APP'D
A	ERN #: 111950	E.T 2/17/07	V.K 2/17/07

1. MATERIAL:
- HEAT SINK: ALUM. (BLACK ANODIZE)
CLIP: BLACK PEI (UL94-V0)
2. BEFORE THE HEATSINK APPLICATION, THE USER SHOULD IDENTIFY THE SPECIFICATION OF MAXIMUM LOAD ON THE BGA PACKAGE.
- HEATSINK TORQUE SPECIFICATIONS CONVERTED TO FORCE.
- BARE DIE PACKAGE:
- 2.0 POUND-FORCE INCH TORQUE = 8.1 POUND-FORCE
(0.23 NEWTON METER TORQUE = 36.03 NEWTON)
- 2.5 POUND-FORCE INCH TORQUE = 10.1 POUND-FORCE
(0.28 NEWTON METER TORQUE = 44.93 NEWTON)
- FULL SIZE LID PACKAGE:
- 2.0 POUND-FORCE INCH TORQUE = 6.9 POUND-FORCE
(0.23 NEWTON METER TORQUE = 30.69 NEWTON)
- 2.5 POUND-FORCE INCH TORQUE = 8.7 POUND-FORCE
(0.28 NEWTON METER TORQUE = 38.70 NEWTON)
3. RoHS COMPLIANT AND CERTIFIED.

Power	° C/W @ Ambient	° C/W @ 200 LFM	° C/W @ 400 LFM	° C/W @ 600 LFM	WITH FAN
5 Watts	5.97	2.40	1.75	1.15	1.17
10 Watts	5.41	2.57	1.90	1.38	1.24
15 Watts	5.08	2.62	1.90	1.43	1.21

CUSTOMER DRAWING	
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE	

ITEM	DESCRIPTION	QTY
1	HEAT SINK	1
2	FAN	1
3	SCREWS	2
4	INTERFACE	1

DO NOT SCALE

tyco Electronics		Attleboro Falls Massachusetts 02763	
UNLESS OTHERWISE SPECIFIED TO TOLERANCES ARE:		DRAWN BY: ETA O	
DATE: 2/16/07		MATERIAL: SEE NOTE	
.XX ± .		ENGINEER: V. KHEIL	
.XXX ± .		DATE: 2/16/07	
.XXXX ± .		FINISH: SEE NOTE	
ANGLES ± °		FILENAME: PROJECT: SYSTEM:	

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DIMENSIONS ARE IN: INCHES		SCALE: 1:1	
THIRD ANGLE PROJECTION		PART NO.: 1963355-1	
DWG. NO.: C-1963355		SHEET: 1 OF 1	
REV: A		REV: A	