

REVISION(S)			
LTR	DESCRIPTION	INIT	APP'D
O	ECN: 0S60-0252-04	E.T 10/18/04	B.P 11/12/04
A	ECR-06-017841	E.T 7/25/06	V.K 7/25/06

1. MATERIAL:
HEAT SINK: ALUM. (BLACK ANODIZE)
CLIP: BLACK PEI (UL94-VO)
2. BEFORE THE HEATSINK APPLICATION, THE USER SHOULD IDENTIFY THE SPECIFICATION OF MAXIMUM LOAD ON THE BGA PACKAGE.

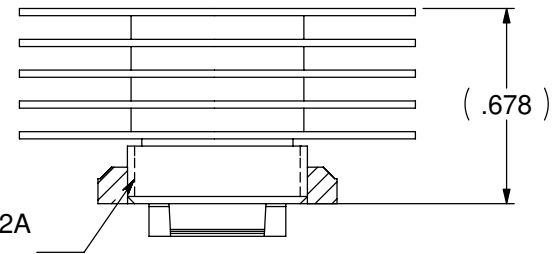
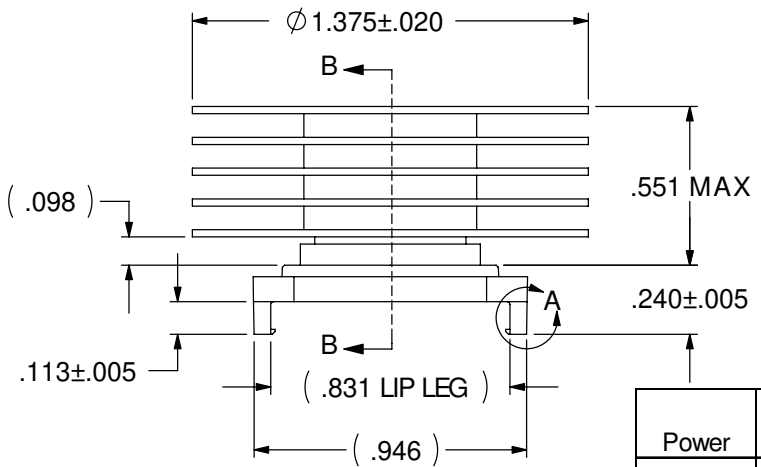
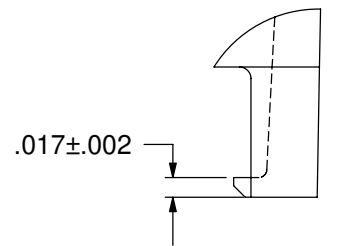
HEATSINK TORQUE SPECIFICATIONS CONVERTED TO FORCE.

BARE DIE PACKAGE:
1.5 POUND-FORCE INCH TORQUE = 8.5 POUND-FORCE (0.17 NEWTON TORQUE = 37.81 NEWTON)

2.0 POUND-FORCE INCH TORQUE = 11.4 POUND-FORCE (0.23 NEWTON METER TORQUE = 50.71 NEWTON)

FULL SIZE LID PACKAGE:
1.5 POUND-FORCE INCH TORQUE = 8.3 POUND-FORCE (0.17 NEWTON TORQUE = 36.92 NEWTON)

2.0 POUND-FORCE INCH TORQUE = 11.1 POUND-FORCE (0.23 NEWTON METER TORQUE = 49.38 NEWTON)
3. remove clip with removal tool p/n: 1542616-1.
4. RoHS COMPLIANT AND CERTIFIED.



Power	° C/W @ Ambient	° C/W @ 200 LFM	° C/W @ 400 LFM	° C/W @ 600 LFM
5 Watts	11.90	4.75	3.50	2.50
10 Watts	10.61	4.64	3.26	2.42
15 Watts	9.74	4.46	3.22	2.41

CUSTOMER DRAWING

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

ITEM	DESCRIPTION	QTY
1	MOUNTING CLIP	1
2	HEAT SINK	1
3	INTERFACE	1

tyco / Electronics Attleboro Falls Massachusetts 02763

UNLESS OTHERWISE SPECIFIED TO LEFANCIES ARE: DRAWN BY: E.TAO DATE: 10/18/04 MATERIAL: SEE NOTE

.XX ± . ENGINEER: B.PETROCELLI DATE: 11/12/04 FINISH: SEE NOTE

.XXX ± . FILENAME: PROJECT: SYSTEM: DIMENSIONS ARE IN: INCHES SCALE: 1.5:1 PART NO.: 1-1542005-3 SHEET: 1 OF 1

.XXXX ± . ANGLES ± * TYPED ANGLE PROJECTION SIZE: A DWG. NO. C-1-1542005-3 REV: A

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TITLE: 21mm HEATSINK ASSEMBLY (HTS653-U)

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C
B
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