

907 Series

Wakefield-Vette's 900 Series Heat Sinks for Chipset can match up to devices from

Intel, Broadcom, Xilinx, TI, Motorola, ATI, AMD, Nvidia, Vishay, Powerex, Infineon, Microsemi, and many more.

These heat sinks are designed for air flow applications in the Telecom, Data Center, Networking, Cloud Computing, and many more Industries.

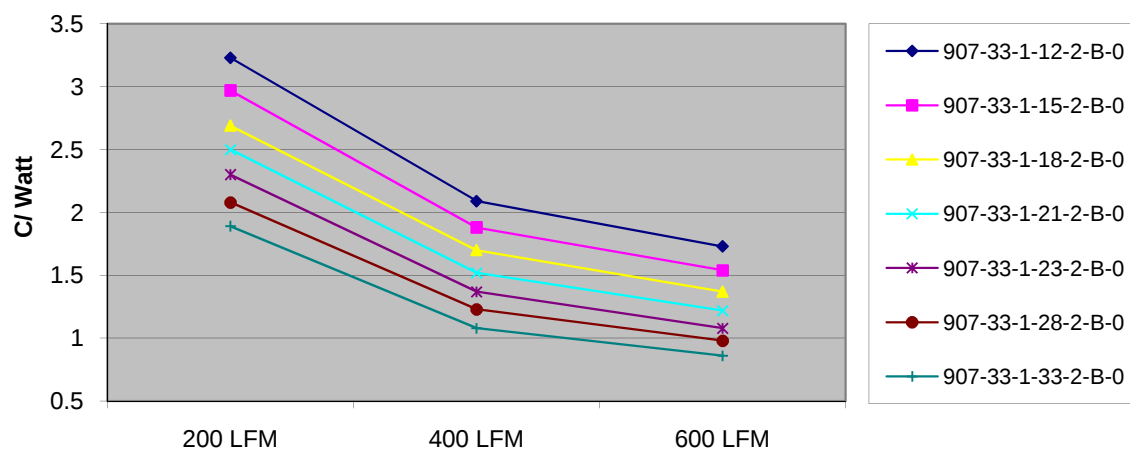
Material: AL 6063

Finish: Black Anodize



PART #	HEIGHT (mm)	CHIP SIZE (mm)	NATURAL CONVECTION	FORCED CONVECTION (C/W)		
				200 LFM	400 LFM	600 LFM
907-33-1-12-2-B-0	12	33	11.56 C/W	3.23 C/W	2.09 C/W	1.73 C/W
907-33-1-15-2-B-0	15	33	11 C/W	2.97 C/W	1.88 C/W	1.54 C/W
907-33-1-18-2-B-0	18	33	10.45 C/W	2.69 C/W	1.7 C/W	1.37 C/W
907-33-1-21-2-B-0	21	33	9.9 C/W	2.5 C/W	1.52 C/W	1.22 C/W
907-33-1-23-2-B-0	23	33	9.54 C/W	2.3 C/W	1.37 C/W	1.08 C/W
907-33-1-28-2-B-0	28	33	8.62 C/W	2.08 C/W	1.23 C/W	.98 C/W
907-33-1-33-2-B-0	33	33	7.71 C/W	1.89 C/W	1.08 C/W	.86 C/W

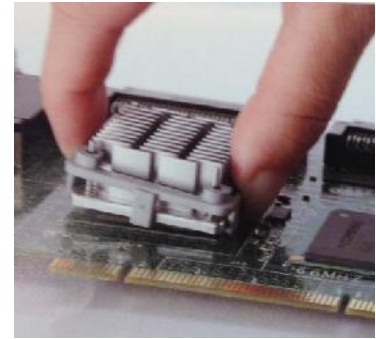
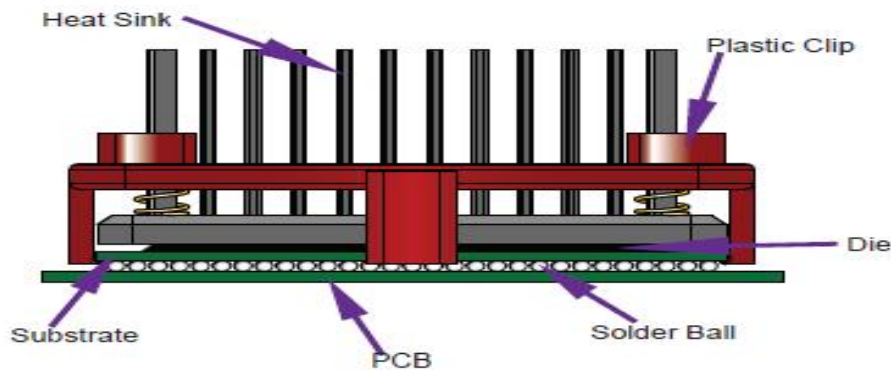
THERMAL PERFORMANCE:



Forced Convection

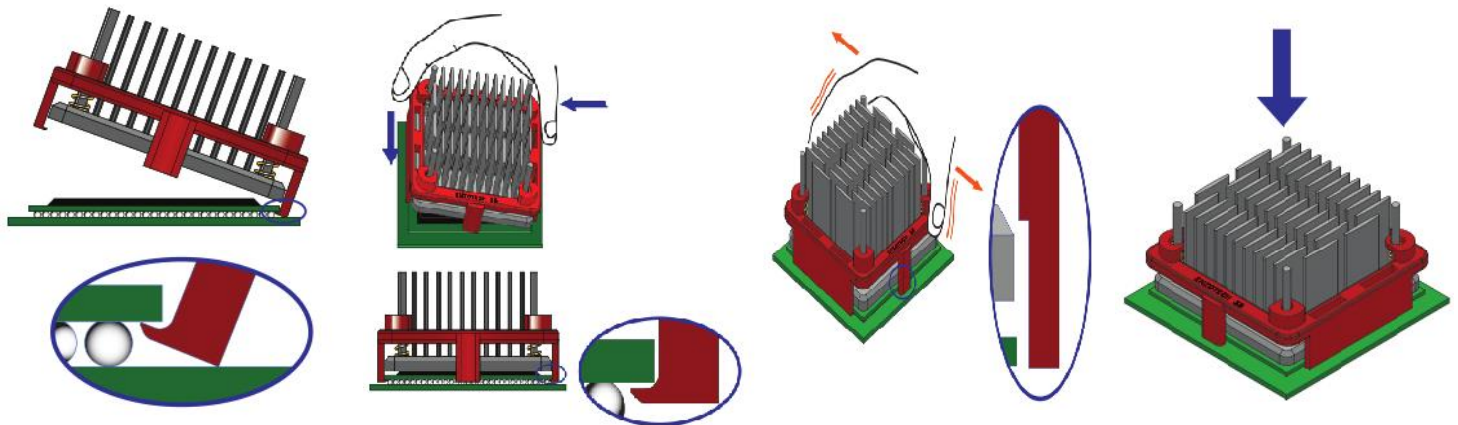
Series	Chip Size	Construction	Height	Chip Height	Finish	Interface
907-	19-	1-	12-	1-	B-	1
	19	1= Elliptical Fin	12 = 11.6	1 = .9-2.1	B = BLK ANO	0 = None
	21		15 = 14.6	2 = 2.2-3.4		1 = T725
	23		18 = 17.6			
	27		21 = 20.6			
	29		23 = 22.6			
	31		28 = 27.6			
	33		33 = 32.6			
	35					
	37.5					
	40					

Thermal Cooling Solutions from Smart to Finish



Wakefield-Vette's heat sink assemblies onto chip set using the space that is between the PCB and the substrate of the solder balls. The solder balls provide a minimal gap of .5mm to .7mm. Attachment feature is below a .4mm thickness. The clipping system will not interfere or damage chip. Contact area is the edge of chip.

ASSEMBLY INSTRUCTION:



Step 1: Hook the clip under one side of the BGA chip set.

Step 2: Rotate assembly down until opposite side clip engages substrate edge of BGA chip set.

Step 3: Make sure the solder rods are clearing from edges of BGA chip set.

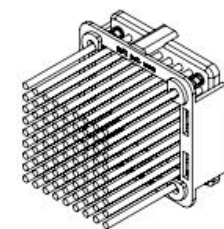
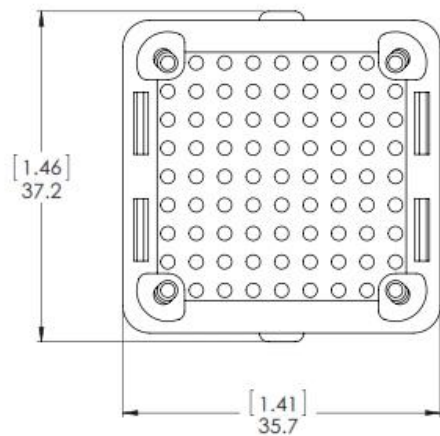
Step 4: Press firmly down to make sure clips fully engage edges of chip set. Heat Sink should not move around easily.

Random Vibration Test

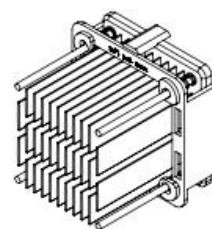
Frequency : 5 Hz to 500 Hz
Acceleration : 3.13 grms
P.S.D : 0.01 g²/HZ (5 Hz)
0.02 g²/HZ (20 Hz to 500 Hz)
Test Axis : X, Y, Z axis
Test Time : 10 mins (Each axis)
Total Test Time : 30 mins

SHOCK TEST SPECIFICATION :

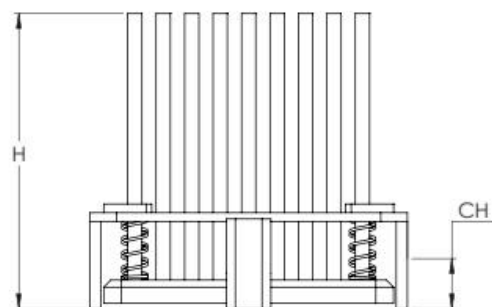
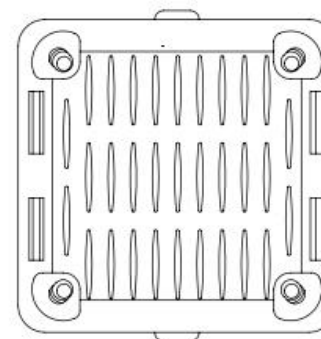
Wave Form : Half sine wave
Acceleration : 50 g
Duration Time : 11 ms
No. of Shock : Each axis 3 times
Shock Direction : $\pm X$, $\pm Y$, $\pm Z$ axis
Reliability & Communication
Testing Instruments



CONSTRUCTION CODE- 2
PIN FINS
9 X 9 PIN ARRAY =
81 FINS, 1.6 mm DIA.



CONSTRUCTION CODE- 1
ELLIPTICAL FINS
31 FINS, 7.8 Lg X 0.7 W mm
4 CORNER PIN FINS

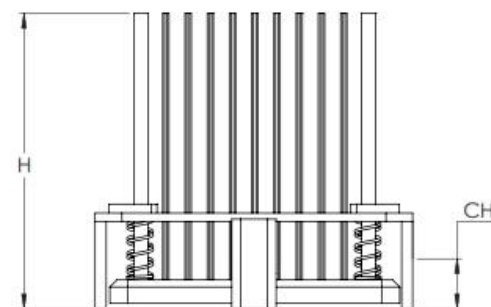


HEIGHT (H)
CODE ACTUAL mm

12-	11.6
15-	14.6
18-	17.6
21-	20.6
23-	22.6
28-	27.6
33-	32.6

CHIP HEIGHT (CH)
CODE ACTUAL RANGE mm

1-	0.9 to 2.1
2-	2.2 to 3.4



907 SERIES FOR 33mm CHIPS

PROPRIETARY AND CONFIDENTIAL		THIRD ANGLE PROJECTION		TOLERANCES			
THE INFORMATION CONTAINED IN THIS DRAWINGS IS THE SOLE PROPERTY OF WAKEFIELD-VETTE. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF WAKEFIELD-VETTE IS PROHIBITED.				ALL DIMS IN MM(IN)		wakefield-vette 30 BRIDGE ST. PELHAM, NH 03078 (603)935-2800 TITLE: 907 SERIES	
		APPROVALS DATE		xx ± 0.5 (0.020") xxx ± 0.25 (0.010") Angles ± 3°			
MATERIAL:		DRAWN:		10/23/2014		DRAWINGS NOT TO SCALE	
6063-T5 AL ALLOY		CHK:				DESCRIPTION:	
FINISH:		DSGN ENG:		10/23/2014		CHIPSET HEAT SINKS	
BLACK ANODIZE		MFG ENG:				DWG. NO. 907 Series 1 OF 1	
QA:							
4		3		MODEL INFO: MBA33052-no lp		1	