



FF323 - Sn/Pb SOLDER BALLS
FFG323 - Sn/Ag/Cu SOLDER BALLS

SYMBOL	MILLIMETERS			NOTE
	MIN.	NOM.	MAX.	
A	2.00	\approx	2.85	2
A ₁	0.40	\approx	0.60	
A ₂	1.60	\approx	2.25	
D/E	19.00 BASIC			
D ₁ /E ₁	17.00 REF			
e	1.00 BASIC			
ϕb	0.50	0.60	0.70	
aaa	\approx	\approx	0.20	
ccc	\approx	\approx	0.25	
ddd	\approx	\approx	0.25	
eee	\approx	\approx	0.10	
M	18			

NOTES:

1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ANSI Y14.5M-1994
 2. SYMBOL 'M' IS THE BALL MATRIX SIZE.
 3. CONFORMS TO JEDEC MS-034-AAG-1
- \triangle SOLDER BALL COUNT = 324

323-BALL FLIP-CHIP BGA (FF323/FFG323)

Revision History

The following table shows the revision history for this document.

Date	Version	Revision
12/07/07	1.0	Initial Xilinx release.
03/24/08	1.1	Updated JEDEC to MS-034-AAG-1