



FF/EF665 - PbSn SOLDER BALLS  
FFG665 - SnAgCu SOLDER BALLS  
FFV665 - SnAgCu SOLDER BALLS

SYMBOL	MILLIMETERS			NOTE
	MIN.	NOM.	MAX.	
A	2.50	<i>∅</i>	2.90	2
A <sub>1</sub>	0.40	<i>∅</i>	0.60	
A <sub>2</sub>	0.65	<i>∅</i>	1.10	
D/E	27.00 BASIC			
D <sub>1</sub> /E <sub>1</sub>	25.00 REF			
e	1.00 BASIC			
øb	0.50	0.60	0.70	
aaa	<i>∅</i>	<i>∅</i>	0.20	
ccc	<i>∅</i>	<i>∅</i>	0.25	
ddd	<i>∅</i>	<i>∅</i>	0.25	
eee	<i>∅</i>	<i>∅</i>	0.10	
M	26			

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-AAL-1 (DEPOPULATED)

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## Revision History

The following table shows the revision history for this document.

Date	Version	Description of Revisions
03/22/2007	1.0	Initial Xilinx release.
08/05/2009	1.1	Changed the overall package thickness (symbol A) from 2.35 min – 3.00 max to 2.50 min – 2.90 max.
06/08/2017	1.2	Added tolerances to the top view of the flat-lid dimension. Updated the <a href="#">Notice of Disclaimer</a> .

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