



FG456 - 63/37 (Sn/Pb) Solder Balls
 FGG456 - Sn/Ag/Cu Solder Balls

SYMBOL	MILLIMETERS			NOTE
	MIN.	NOM.	MAX.	
A	$\cancel{\text{---}}$	$\cancel{\text{---}}$	2.60	3
A ₁	0.35	0.50	0.60	
D/E	23.00 BSC			
D ₁ /E ₁	21.00 REF			2
e	1.00 BSC			
ϕb	0.50	0.60	0.70	
aaa	$\cancel{\text{---}}$	$\cancel{\text{---}}$	0.20	
ccc	$\cancel{\text{---}}$	$\cancel{\text{---}}$	0.35	
ddd	$\cancel{\text{---}}$	$\cancel{\text{---}}$	0.30	
eee	$\cancel{\text{---}}$	$\cancel{\text{---}}$	0.10	
M	22			

NOTES:

1. ALL DIMENSIONS AND TOLERANCES CONFORM TO ANSI Y14.5M-1994
2. SYMBOL 'M' IS THE BALL MATRIX SIZE.
3. NOMINAL 'A' DIMENSION FOR 2-LAYER IS 2.03mm AND FOR 4-LAYER IS 2.20mm.
4. CONFORMS TO JEDEC MS-034-AAJ-1 (DEPOPULATED)

456-BALL FINE-PITCH BGA, 1.00MM PITCH (FG456/FGG456)