


ITEM NO.	PART NUMBER	DESCRIPTION
1	Substrate	SF-BGA-05 substrate for FCBGA 19x19 ( 5 rings @ 0.8mm)+49 (central @1mm).
2	Threaded Insert	#0-80 internal Thread brass insert, Press fit
3	Solder ball	Solder Ball, 0.024" Dia, <b>Sn96.5Ag3.0Cu0.5</b>



Description: SF-BGA-05 SMT adapter for FCBGA 19x19 ( 5 rings @ 0.8mm)+49 (central @1mm).

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.  
 Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.


<b>SF-BGA409A-B-05F Drawing</b>  Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 3.21	STATUS: Released	SHEET: 1 OF 2	REV. A
		ENG: S. Faiz	DRAWN BY: S. Faiz	SCALE: 2.5:1
		FILE: SF-BGA409A-B-05F Dwg	DATE: 3/13/13	

Rev	Date	Initials	Description
A	-	-	Original

### Description: Revision History

Primary dimension units are millimeters, Secondary dimension units are [inches].

Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

 <b>Specification</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	<b>Material:</b> <b>Finish:</b> <b>Weight:</b>	STATUS: Released	SHEET: 2 OF 2	REV. A
		DRAWN BY: S. Faiz	SCALE: 1:1	
		FILE: SF-BGA409A-B-05F Dwg	DATE: 3/13/13	