CBT-QFE DIRECT MOUNT, SOLDERLESS SOCKET FOR BURN-IN AND TEST APPLICATIONS



Description: Clam shell socket for QFP80 0.65mm pitch

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

CBT-QFE-3003 Drawing		Material: Material <not specified=""></not>	STATUS: Released	SHEET: 1 OF 5	REV. A
	Ironwood Electronics, Inc.	Finish: Weight: 68.72	ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 1:1
y	www.ironwoodelectronics.com	Weight. 00.72	FILE: CBT-QFE-3003 Dwg	DATE: 1/8/2015	

*Note: QFE pattern is not symmetrical with respect to the mounting holes.



Description: Recommended PCB layout

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

CBT-QFE-3003 Drawing		Material: Material <not specified=""></not>	STATUS: Released	SHEET: 2 OF 5	REV. A
0	Ironwood Electronics, Inc.	Finish: Weight: 68 72	ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 3:1
9	www.ironwoodelectronics.com	Weight. 00.72	FILE: CBT-QFE-3003 Dwg	DATE: 1/8/2015	

<u>Target PCB Recommendations</u> Total thickness: 1.6mm min. Plating: Gold or Solder finish PCB Pad height: same or higher than solder mask



Description: Compatible device

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

	CBT-QFE-3003 Drawing	Material: Material <not specified=""></not>	STATUS: Released	SHEET: 3 OF 5	REV. A
0	Ironwood Electronics, Inc.	Finish: Weight: 68.72	ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 5:1
$\mathbf{\nabla}$	www.ironwoodelectronics.com	Weight 00.72	FILE: CBT-QFE-3003 Dwg DATE: 1/8/2015	DATE: 1/8/2015	



ITEM NO.	Description	Material
1	Clam shell lid for 17mm IC	7075-T6 Aluminum Alloy
2	Clamshell Latch	7075-T6 Aluminum Alloy
3	M10 Comression Screw with hole	7075-T6 Aluminum Alloy
4	Screw, M3 x 12mm, Low Head Cap, SS	18-8 Stainless Steel
5	Hinge Pin and Snap Ring, 3mm OD, 25mm long, SS	Stainless Steel (ferritic)
6	Screw, #0-80 X .188", Flat, SS	Stainless Steel (18-8)
7	Floating guide	Semitron MDS 100
8	Floating Guide Spring	Alloy Steel (SS)
9	CBT Socket Base 18mm W posts	7075-T6 Aluminum Alloy
10	#0-80 X .375 LG, SOC HD CAP SCREW, ALLOY STL, BLK OXIDE	Alloy Steel
11	Spring Clamshell lid assembly	Steel Music Wire
12	Precision Compression Spring, Zinc-Plated Music Wire, 1/2" Length, .12" OD, .016" Wire	Zinc Plated Music Wire
13	Middle guide	Semitron MDS 100
14	Bottom pin guide	Semitron MDS 100
15	SBT Pin, 0.4mm pitch	N/A
16	Pin Orientation Guide	Kapton Polyimide/Cirlex
17	Customer's target PCB	Material <not specified=""></not>
18	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
19	316 SS General Purpose Flat Washer NO. 0 Screw Size, 3/16" OD, .01"03" Thick	AISI 316 Stainless Steel Sheet (SS)
20	QFP Compression Plate	Torlon 5530
21	Customer's device	

Instructions:

- Drop the QFE package in the socket and make sure the QFE leads are sitting inside the guide slots of the floating guide (item14) Turn the fluted knob screw (item 3) until it contacts the QFE chip. From that point, turn the fluted knob (item 3) four full turns to get the desired compression, or until the floating guide (item 14) bottoms out on the middle guide (item 15)

Description: Socket Spec

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

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

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CI	BT-QFE-3003 Drawing
	Ironwood Electronics, Inc.
	www.ironwoodelectronics.com

Material: Material <not specified=""></not>	STATUS: Released	SHEET: 4 OF 5	REV. A
Finish: Neight: 68 72	ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 1.4:1
	FILE: CBT-QFE-3003 Dwg	DATE: 1/8/2015	

Socket base, Compression Plate (top view)

Socket base, Compression Plate (side view)

Socket base, Compression Plate (bottom view)











Description: Socket base, Compression plate

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams. <u>Tolerances</u>: Hole diameters ± 0.3 mm [$\pm 0.001^{\circ}$], Pitches (from true position) ± 0.025 mm [$\pm 0.001^{\circ}$], substrate thickness tolerance $\pm 10\%$, all other tolerances ± 0.13 mm [$\pm 0.005^{\circ}$] unless stated otherwise. Materials and specifications are subject to change without notice.

CBT-QFE-3003 Drawing

Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com

Finish: Weight: 68.72

STATUS: Released	SHEET: 5 OF 5	REV. A
ENG: E. Smolentseva	DRAWN BY: M. Raske	SCALE: 1.75:1
FILE: CBT-QFE-3003 Dwg	DATE: 1/8/2015	