Application Note

BRT_AN_049

Bridgetek Tape, Reel and Tray Dimensions

Version 1.1

Issue Date: 18-11-2020

This document provides information on the tape, reel and tray dimensions for FT800Q, FT801Q, FT810Q, FT811Q, FT812Q, FT813Q, BT815Q, BT816Q, BT817Q, BT818Q, FT900Q, FT901Q, FT902Q, FT903Q, FT905Q, FT906Q, FT907Q, FT908Q, FT900L, FT901L, FT902L, FT903L, FT905L, FT906L, FT907L and FT908L.

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1 Introduction

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**Note:** For tape and reel packaging, pin 1 location is identified as the small circle within the package as shown in Figure 1.1.

![Figure 1.1 Tape and Reel Pin1 Identifier](image1.png)

**Note:** For tray packaging, pin 1 location is identified as the 45 degree chamfer as shown in Figure 1.2.

![Figure 1.2 Tray Pin1 Identifier](image2.png)
2 Packaging Options

Bridgetek can supply devices packaged in tape and reel packaging or in trays. The quantities in each package type are described in Table 2.1 and Table 2.2.

Tape and Reel Packaging

<table>
<thead>
<tr>
<th>IC – Tape and Reel</th>
<th>Package</th>
<th>Quantities (pieces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT800Q, FT801Q -R</td>
<td>QFN 48</td>
<td>3000</td>
</tr>
<tr>
<td>FT810Q, FT811Q -R</td>
<td>QFN 48</td>
<td>3000</td>
</tr>
<tr>
<td>FT812Q, FT813Q -R</td>
<td>QFN 56</td>
<td>3000</td>
</tr>
<tr>
<td>BT815Q, BT816Q -R</td>
<td>QFN 64</td>
<td>3000</td>
</tr>
<tr>
<td>BT817Q, BT818Q -R</td>
<td>QFN 64</td>
<td>3000</td>
</tr>
<tr>
<td>FT900Q, FT901Q, FT902Q, FT903Q -R</td>
<td>QFN 100</td>
<td>1000</td>
</tr>
<tr>
<td>FT900L, FT901L, FT902L, FT903L -R</td>
<td>QFP 100</td>
<td>1000</td>
</tr>
<tr>
<td>FT905Q, FT906Q, FT907Q, FT908Q -R</td>
<td>QFN 76</td>
<td>3000</td>
</tr>
<tr>
<td>FT905L, FT906L, FT907L, FT908L -R</td>
<td>QFP 80</td>
<td>1000</td>
</tr>
<tr>
<td>FT930Q –R</td>
<td>QFN 68</td>
<td>3000</td>
</tr>
<tr>
<td>FT931Q –R</td>
<td>QFN 56</td>
<td>3000</td>
</tr>
<tr>
<td>FT932Q, FT933Q –R</td>
<td>QFN 48</td>
<td>3000</td>
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Table 2.1 – Tape and Reel Quantities

Tray Packaging

<table>
<thead>
<tr>
<th>IC – Tray</th>
<th>Package</th>
<th>Quantities (pieces)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FT800Q, FT801Q -R</td>
<td>QFN 48</td>
<td>260</td>
</tr>
<tr>
<td>FT810Q, FT811Q -R</td>
<td>QFN 48</td>
<td>260</td>
</tr>
<tr>
<td>FT812Q, FT813Q -R</td>
<td>QFN 56</td>
<td>348</td>
</tr>
<tr>
<td>BT815Q, BT816Q -R</td>
<td>QFN 64</td>
<td>260</td>
</tr>
<tr>
<td>BT817Q, BT818Q -R</td>
<td>QFN 64</td>
<td>260</td>
</tr>
<tr>
<td>FT900Q, FT901Q, FT902Q, FT903Q -R</td>
<td>QFN 100</td>
<td>152</td>
</tr>
<tr>
<td>FT900L, FT901L, FT902L, FT903L -R</td>
<td>QFP 100</td>
<td>90</td>
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<tr>
<td>FT905Q, FT906Q, FT907Q, FT908Q -R</td>
<td>QFN 76</td>
<td>260</td>
</tr>
<tr>
<td>FT905L, FT906L, FT907L, FT908L -R</td>
<td>QFP 80</td>
<td>160</td>
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<tr>
<td>FT930Q –R</td>
<td>QFN 68</td>
<td>348</td>
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<tr>
<td>FT931Q –R</td>
<td>QFN 56</td>
<td>348</td>
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<tr>
<td>FT932Q, FT933Q –R</td>
<td>QFN 48</td>
<td>250</td>
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Table 2.2 – Tray Quantities
3 FT800Q, FT801Q Reel Dimensions

Figure 3.1 FT800Q, FT801Q Reel Dimensions
4 FT800Q, FT801Q Tape Dimensions

Figure 4.1 FT800Q, FT801Q Tape Dimensions
5 FT800Q, FT801Q Tray Dimensions

Figure 5.1 FT800Q, FT801Q Tray Dimensions
NOTE:
1. HEAT RESISTANCE UP TO 24 HOURS 150°C.
2. SURFACE ELECTRIC RESISTIVITY LESS THAN 10^{12} \, \Omega / \text{sq}
3. WARPAGE IS WITHIN 0.76mm.
4. TOLERANCE: X = \pm 0.5mm
   X.X = \pm 0.25mm
   X.XX = \pm 0.13mm
5. Material: PPE+Carbon Fiber

Figure 5.2 FT800Q, FT801Q Tray Dimensions
6 FT810Q, FT811Q, FT932Q, FT933Q Reel Dimensions

Figure 6.1 FT810Q, FT811Q, FT932Q, FT933Q Reel Dimensions
7 FT810Q, FT811Q, FT932Q, FT933Q Tape Dimensions

Figure 7.1 FT810Q, FT811Q, FT932Q, FT933Q Tape Dimensions
8 FT810Q, FT811Q, FT932Q, FT933Q Tray Dimensions

Figure 8.1 FT810Q, FT811Q, FT932Q, FT933Q Tray Dimensions
NOTE:
1. HEAT RESISTANCE UP TO 24 HOURS 150°C.
2. SURFACE ELECTRIC RESISTIVITY LESS THAN $10^{12}$ $\Omega$/sq
3. WARPAGE IS WITHIN 0.76 mm.
4. TOLERANCE: $X = \pm 0.5$ mm
   $X.X = \pm 0.25$ mm
   $X.XX = \pm 0.13$ mm
5. Material: PPE+Carbon Fiber

Figure 8.2 FT810Q, FT811Q, FT932Q, FT933Q Tray Dimensions
9 FT812Q, FT813Q, FT930Q, FT931Q Reel Dimensions

Figure 9.1 FT812Q, FT813Q, FT930Q, FT931Q Reel Dimensions
1. Sprocket hole pitch cumulative tolerance ± 0.2

2. Camber not to exceed 10mm in 1000mm.


4. Ao and Bo measured on a plane 0.3mm above the bottom of the pocket to the inside of the pocket and on a plane on the bottom of the pocket.

5. Pocket position relative to sprocket hole measured as true position of pocket, not pocket hole.

Figure 10.1 FT812Q, FT813Q, FT930Q, FT931Q Tape Dimensions
**11 FT812Q, FT813Q, FT930Q, FT931Q Tray Dimensions**

**Figure 11.1 FT812Q, FT813Q, FT930Q, FT931Q Tray Dimensions**
12 BT815Q, BT816Q, FT905Q, FT906Q, FT907Q, FT908Q
Reel Dimensions

Figure 12.1 BT815Q, BT816Q, FT905Q, FT906Q, FT907Q, FT908Q Reel Dimensions
13BT815Q, BT816Q, FT905Q, FT906Q, FT907Q, FT908Q

Tape Dimensions

Notes:
1. 0 sprocket hole pitch cumulative tolerance ± 0.2
2. 0 and B0 measured on a plane 0.3 mm above the bottom of the pocket.
3. Pocket width (bottom to top). Pocket height (top surface of the corner to the bottom of the pocket).
4. Pocket position relative to sprocket hole (not pocket hole).

Figure 13.1 BT815Q, BT816Q, FT905Q, FT906Q, FT907Q, FT908Q Tape Dimensions
**BT815Q, BT816Q, FT905Q, FT906Q, FT907Q, FT908Q Tray Dimensions**

![Diagram showing BT815Q, BT816Q, FT905Q, FT906Q, FT907Q, FT908Q Tray Dimensions](image_url)

*Figure 14.1 BT815Q, BT816Q, FT905Q, FT906Q, FT907Q, FT908Q Tray Dimensions*
NOTE:
1. HEAT RESISTANCE UP TO 24 HOURS 150°C.

© 2. SURFACE ELECTRIC RESISTIVITY $1 \times 10^5$ to $9 \times 10^9$ $\Omega$ /sq
3. WARPAGE IS WITHIN 0.76mm.
4. TOLERANCE: $X = \pm 0.5mm$
   $X.X = \pm 0.25mm$
   $X.XX = \pm 0.13mm$
5. Material: PPE + Carbon Fiber

Figure 14.2 BT815Q, BT816Q, FT905Q, FT906Q, FT907Q, FT908Q Tray Dimensions
15 BT817Q, BT818Q, Reel Dimensions

![Diagram of BT817Q, BT818Q, Reel Dimensions]

**Figure 15.1 BT817Q, BT818Q, Reel Dimensions**

<table>
<thead>
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<tr>
<td>TAPE WIDTH</td>
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<td>16MM</td>
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</table>
Figure 16.1 BT817Q, BT818Q, Tape Dimensions
17 BT817Q, BT818Q, Tray Dimensions

Figure 17.1 BT817Q, BT818Q Tray Dimensions

NOTES:
1. USE DIMENSIONS MEASURE SURFACE ELECTRIC RESISTIVITY OF THE TAPE
2. THE VACUUM TRAY MATERIAL SHALL BE RIGID ENOUGH TO AVOID DAMAGE TO THE COMPONENTS DURING HANDLING, BLOCKING, STORING, SHIPMENT AND HANDLING.
3. TRAYS ARE stackable WITHOUT INTERFECE AND WELL WITH OTHER ELECTRONIC ASSEMBLY SUPPORTING COMPONENTS.
4. VARIANCE IS WITHIN 0.7% MAX
5. THE CELLS MARKED WITH CROSS SYMBOL ARE FOR VACUUM PICKUP AREA AND WITHOUT THRU HOLE.
6. TOTAL VISABLE CELLS SHOWN HERE.
7. ALL DIMENSIONS ARE IN MILLIMETERS.
Figure 17.2 BT817Q, BT818Q Tray Dimensions
18 FT900Q, FT901Q, FT902Q, FT903Q Reel Dimensions

Figure 18.1 FT900Q, FT901Q, FT902Q, FT903Q Reel Dimensions
Figure 19.1 FT900Q, FT901Q, FT902Q, FT903Q Tape Dimensions
20 FT900Q, FT901Q, FT902Q, FT903Q Tray Dimensions

Figure 20.1 FT900Q, FT901Q, FT902Q, FT903Q Tray Dimensions
Figure 20.2 FT900Q, FT901Q, FT902Q, FT903Q Tray Dimensions

NOTE:
1. HEAT RESISTANCE UP TO 24 HOURS 150°C.
2. SURFACE ELECTRIC RESISTIVITY LESS THAN 10^12 ohm.cm
3. WARPAGE IS WITHIN 0.76mm.
4. FORBID USING THE FIRST CLASS ENVIRONMENT RESTRICTS SUBSTANCES MATERIAL
21FT900L, FT901L, FT902L, FT903L Reel Dimensions

Figure 21.1 FT900L, FT901L, FT902L, FT903L Reel Dimensions
22FT900L, FT901L, FT902L, FT903L Tape Dimensions

Figure 22.1 FT900L, FT901L, FT902L, FT903L Tape Dimensions
Figure 23.1 FT900L, FT901L, FT902L, FT903L Tray Dimensions
24 FT905L, FT906L, FT907L, FT908L Reel Dimensions

Figure 24.1 FT905L, FT906L, FT907L, FT908L Reel Dimensions
25 FT900L, FT901L, FT902L, FT903L Tape Dimensions

Figure 25.1 FT905L, FT906L, FT907L, FT908L Tape Dimensions
26 FT900L, FT901L, FT902L, FT903L Tray Dimensions

Figure 26.1 FT905L, FT906L, FT907L, FT908L Tray Dimensions
27 Contact Information

Head Quarters – Singapore

Bridgetek Pte Ltd
178 Paya Lebar Road, #07-03
Singapore 409030
Tel: +65 6547 4827
Fax: +65 6841 6071

E-mail (Sales)  sales.apac@brtchip.com
E-mail (Support)  support.apac@brtchip.com

Branch Office – Taipei, Taiwan

Bridgetek Pte Ltd, Taiwan Branch
2 Floor, No. 516, Sec. 1, Nei Hu Road, Nei Hu District
Taipei 114
Taiwan, R.O.C.
Tel: +886 (2) 8797 1330
Fax: +886 (2) 8751 9737

E-mail (Sales)  sales.apac@brtchip.com
E-mail (Support)  support.apac@brtchip.com

Branch Office – Glasgow, United Kingdom

Bridgetek Pte. Ltd.
Unit 1, 2 Seaward Place, Centurion Business Park
Glasgow G41 1HH
United Kingdom
Tel: +44 (0) 141 429 2777
Fax: +44 (0) 141 429 2758

E-mail (Sales)  sales.emea@brtchip.com
E-mail (Support)  support.emea@brtchip.com

Branch Office – Vietnam

Bridgetek VietNam Company Limited
Lutaco Tower Building, 5th Floor, 173A Nguyen Van Troi,
Ward 11, Phu Nhuuan District,
Ho Chi Minh City, Vietnam
Tel : 08 38453222
Fax : 08 38455222

E-mail (Sales)  sales.apac@brtchip.com
E-mail (Support)  support.apac@brtchip.com

Web Site

http://brtchip.com/

Distributor and Sales Representatives

Please visit the Sales Network page of the Bridgetek Web site for the contact details of our distributor(s) and sales representative(s) in your country.

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Appendix A– References

Document References

N/A

Acronyms and Abbreviations

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<tr>
<th>Terms</th>
<th>Description</th>
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<tbody>
<tr>
<td>LQFP</td>
<td>Low Profile Quad Flat Pack</td>
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<tr>
<td>QFN</td>
<td>Quad Flat No-Leads Package</td>
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## Appendix C – Revision History

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<th>Revision</th>
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<td>Initial Release</td>
<td>12-06-2019</td>
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<tr>
<td>1.1</td>
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<td>18-11-2020</td>
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