

PACKAGE INFORMATION

7. PACKING

This document is Chapter 7 of the package information document consisting of 8 chapters in total.

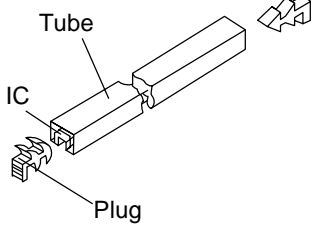
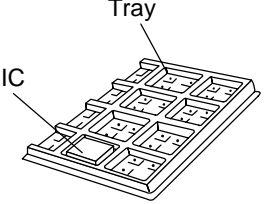
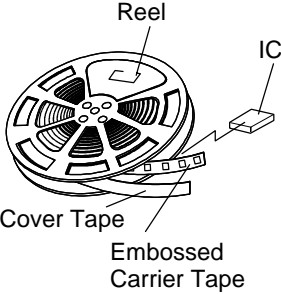
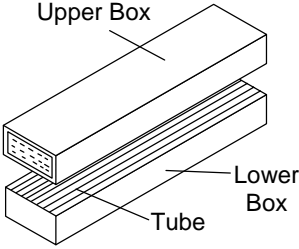
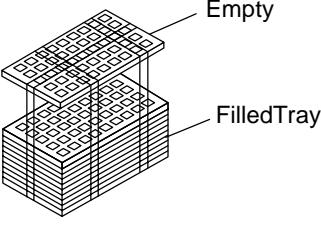
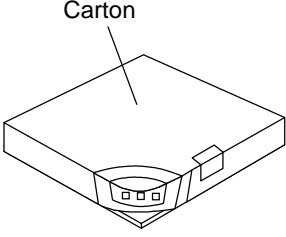
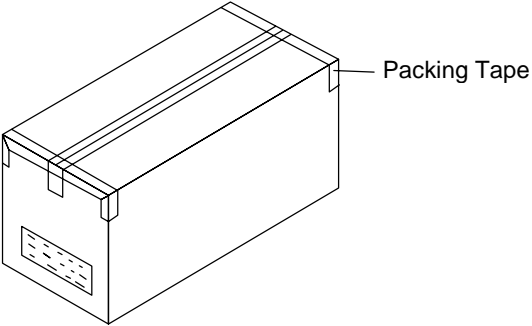
7. PACKING

7.1 Packing Type

7.1.1 Ordinary Packing

Packing of OKI Semiconductor products consists of tubes, trays and tapes-and-reels, inner boxes, and an outer box.

Tubes, trays and tapes-and-reels are designed to keep products free from damage. Products must be handled carefully after unpacking.

	Tube	Tray	Tape & Reel
Individual Packing	 <p>Diagram illustrating individual packing of a tube. The components shown are the Tube, IC, and Plug.</p>	 <p>Diagram illustrating individual packing of a tray. The components shown are the Tray and IC.</p>	 <p>Diagram illustrating individual packing of a tape and reel. The components shown are the Reel, Cover Tape, Embossed Carrier Tape, and IC.</p>
Inner Box	 <p>Diagram illustrating inner box packing. The components shown are the Upper Box, Lower Box, and Tube.</p>	 <p>Diagram illustrating inner box packing. The components shown are the Empty tray and Filled Tray.</p>	 <p>Diagram illustrating inner box packing. The component shown is the Carton.</p>
Outer Box	 <p>Diagram illustrating outer box packing. The component shown is the Packing Tape.</p>		

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7.1.2 Moisture-Proof Packing

	Tube	Tray	Tape-and-Reel
Packing	<p>Indicator Card Desiccant Tube</p>	<p>Indicator Card Desiccant Tray</p>	<p>Indicator Card Desiccant Reel</p>
Moisture-proof Packing	<p>Moisture-proof Bag Tube</p>	<p>Moisture-proof Bag Tray</p>	<p>Moisture-proof Bag Reel</p>
Inner Box	<p>Upper Box Lower Box Inner Box</p>	<p>Cushioning Material Inner Box</p>	<p>Inner Box</p>
Outer Box	<p>Inner Box Inner Box Outer Box Cushioning Material</p>	<p>Inner Box Inner Box Outer Box Cushioning Material</p>	<p>Outer Box</p>

7.2 Specifications of Tubes, Trays and Tapes-and-Reels

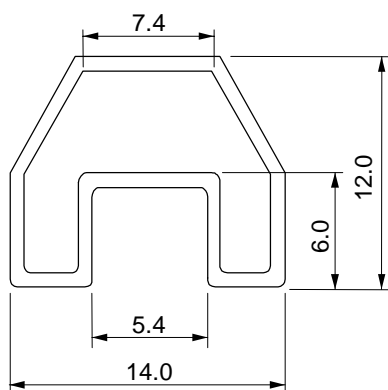
7.2.1 Tubes

(1) DIP

Unit: mm

300mil DIP
Plastic DIP, SKINNY DIP, CER DIP

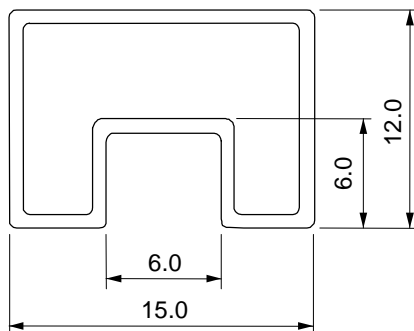
Tube Drawing No: QSJ-44400
Plate Thickness: 0.5
Length: 504
Material: Transparent Hard PVC
(anti-static)



Package Code	Max. CAP ICs/tube
DIP8-P-300-2.54	50
DIP14-P-300-2.54	25
DIP16-P-300-2.54	25
DIP18-P-300-2.54	20
DIP20-P-300-2.54-W1	19
DIP20-P-300-2.54-S1	17
DIP22-P-300-2.54-S1	17
DIP8-G-300-2.54	50
DIP14-G-300-2.54	24
DIP16-G-300-2.54	24
DIP18-G-300-2.54	20

400mil DIP
Plastic DIP, CER DIP

Tube Drawing No: QSJ-44403
Plate Thickness: 0.5
Length: 504
Material: Transparent Hard PVC
(anti-static)



Package Code	Max. CAP ICs/tube
DIP22-P-400-2.54	17
SDIP30-P-400-1.778	17
DIP22-G-400-2.54	17

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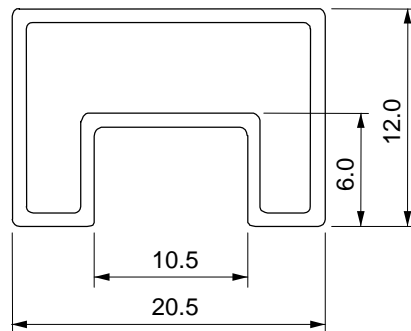
7. PACKING

(1) DIP

Unit: mm

600mil DIP
Plastic DIP, CER DIP

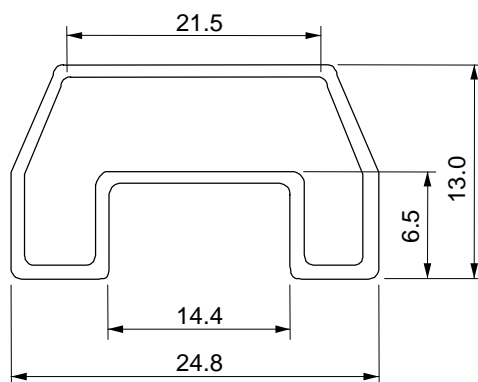
Tube Drawing No: QSJ-44404
Plate Thickness: 0.6
Length: 504
Material: Transparent Hard PVC
(anti-static)



Package Code	Max. CAP ICs/tube
DIP24-P-600-2.54	15
DIP28-P-600-2.54	13
DIP32-P-600-2.54	11
DIP36-P-600-2.54	10
DIP40-P-600-2.54	9
DIP42-P-600-2.54	9
DIP48-P-600-2.54	8
SDIP42-P-600-1.778	12
DIP24-G-600-2.54	15
DIP28-G-600-2.54	13
WDIP28-G-600-2.54	13
WDIP32-G-600-2.54	11
DIP40-G-600-2.54	9
WDIP40-G-600-2.54	9
DIP42-G-600-2.54	8

750mil DIP
Plastic DIP

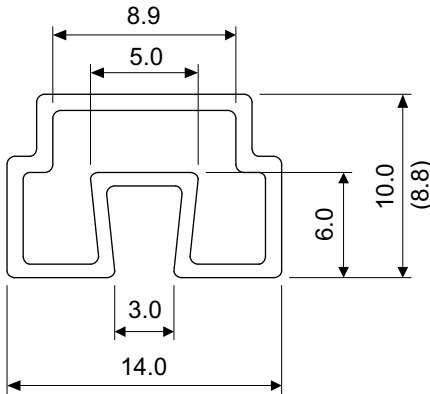
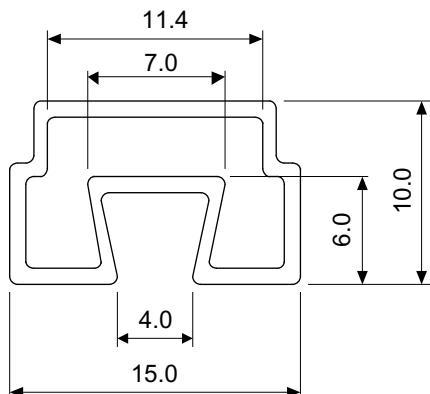
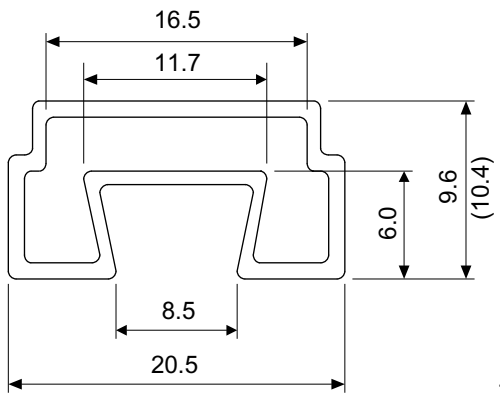
Tube Drawing No: QSJ-44412
Plate Thickness: 0.7
Length: 504
Material: Transparent Hard PVC
(anti-static)



Package Code	Max. CAP ICs/tube
SDIP64-P-750-1.778	8

(1) DIP

Unit: mm

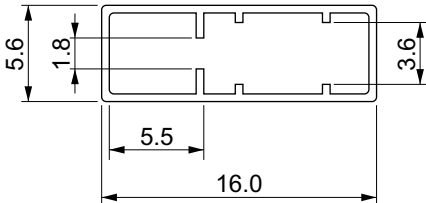
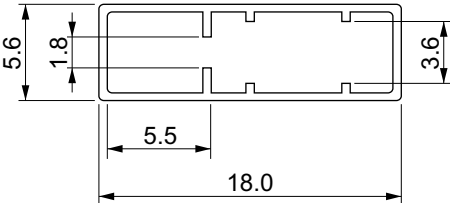
<p>300mil CeramicDIP</p> 	<p>Tube Drawing No: QSJ-50058, (50059) Plate Thickness : 0.5 Length : 504 Material : Transparent Hard PVC (anti-static)</p> <table border="1" data-bbox="917 571 1340 734"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>DIP14-C-300-2.54</td> <td>24</td> </tr> <tr> <td>DIP16-C-300-2.54</td> <td>24</td> </tr> <tr> <td>DIP18-C-300-2.54</td> <td>20</td> </tr> <tr> <td>DIP20-C-300-2.54</td> <td>18</td> </tr> </tbody> </table> <p>The dimension in parenthesis is for DIP20</p>	Package Code	Max. cap ICs/tube	DIP14-C-300-2.54	24	DIP16-C-300-2.54	24	DIP18-C-300-2.54	20	DIP20-C-300-2.54	18		
Package Code	Max. cap ICs/tube												
DIP14-C-300-2.54	24												
DIP16-C-300-2.54	24												
DIP18-C-300-2.54	20												
DIP20-C-300-2.54	18												
<p>400mil CeramicDIP</p> 	<p>Tube Drawing No: QSJ-50060 Plate Thickness : 0.5 Length : 504 Material : Transparent Hard PVC (anti-static)</p> <table border="1" data-bbox="917 1097 1340 1171"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>DIP22-C-400-2.54</td> <td>17</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	DIP22-C-400-2.54	17								
Package Code	Max. cap ICs/tube												
DIP22-C-400-2.54	17												
<p>600mil CeramicDIP</p> 	<p>Tube Drawing No: QSJ-50061, (50062) Length : 0.6 Plate Thickness : 504 Material : Transparent Hard PVC (anti-static)</p> <table border="1" data-bbox="917 1624 1340 1818"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>DIP24-C-600-2.54</td> <td>15</td> </tr> <tr> <td>DIP28-C-600-2.54</td> <td>13</td> </tr> <tr> <td>DIP40-C-600-2.54</td> <td>9</td> </tr> <tr> <td>DIP42-C-600-2.54</td> <td>9</td> </tr> <tr> <td>DIP48-C-600-2.54</td> <td>7</td> </tr> </tbody> </table> <p>The dimension in parenthesis is for DIP42 and DIP48.</p>	Package Code	Max. cap ICs/tube	DIP24-C-600-2.54	15	DIP28-C-600-2.54	13	DIP40-C-600-2.54	9	DIP42-C-600-2.54	9	DIP48-C-600-2.54	7
Package Code	Max. cap ICs/tube												
DIP24-C-600-2.54	15												
DIP28-C-600-2.54	13												
DIP40-C-600-2.54	9												
DIP42-C-600-2.54	9												
DIP48-C-600-2.54	7												

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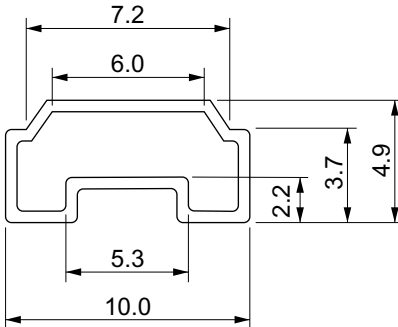
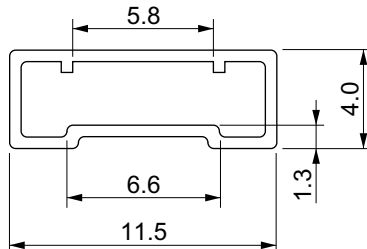
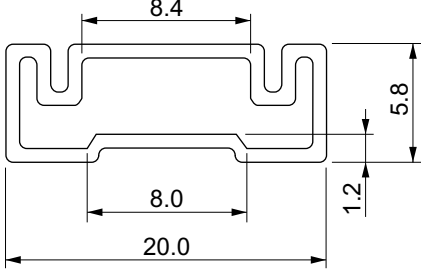
(2) ZIP

Unit: mm

	<p>Tube Drawing No: QSJ-44440 Plate Thickness : 0.5 Length : 495 Material : Transparent Hard PVC (anti-static)</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: center;">Package Code</th> <th style="text-align: center;">Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>ZIP20-P-400-1.27</td> <td style="text-align: center;">18</td> </tr> <tr> <td>ZIP20-P-400-1.27-W1</td> <td style="text-align: center;">18</td> </tr> <tr> <td>ZIP24-P-400-1.27</td> <td style="text-align: center;">15</td> </tr> <tr> <td>ZIP28-P-400-1.27</td> <td style="text-align: center;">13</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	ZIP20-P-400-1.27	18	ZIP20-P-400-1.27-W1	18	ZIP24-P-400-1.27	15	ZIP28-P-400-1.27	13
Package Code	Max. cap ICs/tube										
ZIP20-P-400-1.27	18										
ZIP20-P-400-1.27-W1	18										
ZIP24-P-400-1.27	15										
ZIP28-P-400-1.27	13										
	<p>Tube Drawing No: QSJ-44538 Plate Thickness : 0.5 Length : 495 Material : Transparent Hard PVC (anti-static)</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: center;">Package Code</th> <th style="text-align: center;">Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>ZIP40-P-475-1.27</td> <td style="text-align: center;">9</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	ZIP40-P-475-1.27	9						
Package Code	Max. cap ICs/tube										
ZIP40-P-475-1.27	9										

(3) SOP

Unit: mm

	<p>Tube Drawing No: QSJ-44422 Plate Thickness : 0.6 Length : 530 Material : Transparent Hard PVC (anti-static)</p> <table border="1" data-bbox="917 571 1340 683"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOP8-P-250-1.27-K</td> <td>100</td> </tr> <tr> <td>SSOP20-P-250-0.95-K</td> <td>50</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	SOP8-P-250-1.27-K	100	SSOP20-P-250-0.95-K	50
Package Code	Max. cap ICs/tube						
SOP8-P-250-1.27-K	100						
SSOP20-P-250-0.95-K	50						
	<p>Tube Drawing No: QSJ-44424 Plate Thickness : 0.5 Length : 490 Material : Transparent Hard PVC (anti-static)</p> <table border="1" data-bbox="917 1097 1340 1176"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOP16-P-300-1.27-K</td> <td>45</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	SOP16-P-300-1.27-K	45		
Package Code	Max. cap ICs/tube						
SOP16-P-300-1.27-K	45						
	<p>Tube Drawing No: QSJ-44426 Plate Thickness : 0.5 Length : 504 Material : Transparent Hard PVC (anti-static)</p> <table border="1" data-bbox="917 1624 1340 1736"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOP24-P-430-1.27-K</td> <td>30</td> </tr> <tr> <td>SSOP32-P-430-1.00-K</td> <td>30</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	SOP24-P-430-1.27-K	30	SSOP32-P-430-1.00-K	30
Package Code	Max. cap ICs/tube						
SOP24-P-430-1.27-K	30						
SSOP32-P-430-1.00-K	30						

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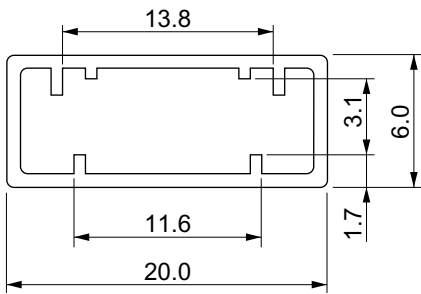
(3) SOP

Unit: mm

<p>Technical drawing of SOP28-P-430-1.27-K showing dimensions: 9.6, 7.0, 20.0, 1.7, 2.6, 6.0.</p>	<p>Tube Drawing No: QSJ-44456 Plate Thickness : 0.8 Length : 504 Material : Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOP28-P-430-1.27-K</td> <td>25</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	SOP28-P-430-1.27-K	25		
Package Code	Max. cap ICs/tube						
SOP28-P-430-1.27-K	25						
<p>Technical drawing of SOP32-P-525-1.27-K showing dimensions: 11.8, 10.0, 20.0, 1.5, 3.1, 6.0.</p>	<p>Tube Drawing No: QSJ-44536 Plate Thickness : 0.6 Length : 504 Material : Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOP32-P-525-1.27-K</td> <td>23</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	SOP32-P-525-1.27-K	23		
Package Code	Max. cap ICs/tube						
SOP32-P-525-1.27-K	23						
<p>Technical drawing of SOP40-P-525-1.27-K and SSOP64-P-525-0.80-K showing dimensions: 11.8, 10.5, 20.0, 1.5, 2.35, 6.0.</p>	<p>Tube Drawing No: QSJ-50026 Plate Thickness : 0.5 Length : 504 Material : Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOP40-P-525-1.27-K</td> <td>18</td> </tr> <tr> <td>SSOP64-P-525-0.80-K</td> <td>18</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	SOP40-P-525-1.27-K	18	SSOP64-P-525-0.80-K	18
Package Code	Max. cap ICs/tube						
SOP40-P-525-1.27-K	18						
SSOP64-P-525-0.80-K	18						

(3) SOP

Unit: mm



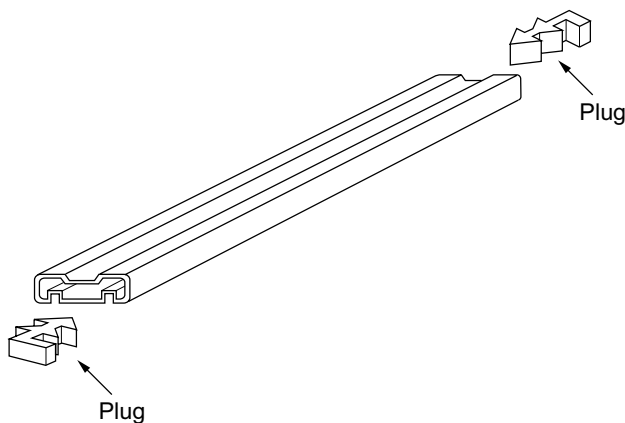
Tube Drawing No: QSJ-50016
 Plate Thickness : 0.8
 Length : 504
 Material : Transparent Hard PVC
 (anti-static)

Package Code	Max. cap ICs/tube
SOP44-P-600-1.27-K	17
SSOP70-P-500-0.80-K	16

Note 1.

Plug

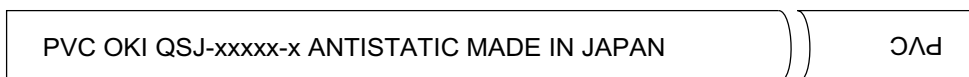
Material: Thermoplastic Elastomer



Tube for SOP

Note 2.

Indication on the Tube (for standard tube)



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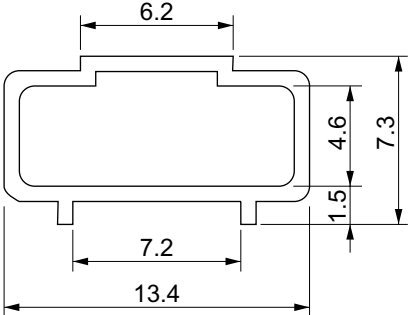
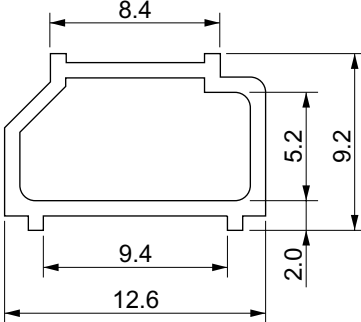
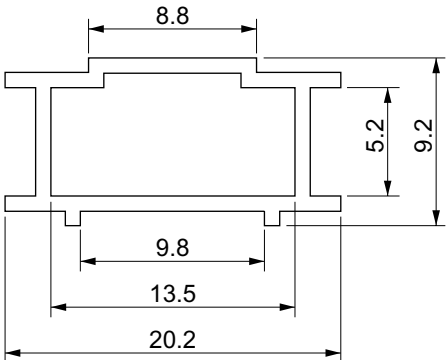
(4) SOJ, QFJ (PLCC)

Unit: mm

	<p>Tube Drawing No: QSJ-50014 Plate Thickness: 0.6 Length: 495 Material: Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. CAP ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOJ26/20-P-300-1.27</td> <td>27</td> </tr> <tr> <td>SOJ26/24-P-300-1.27</td> <td>27</td> </tr> <tr> <td>SOJ26/24-P-300-1.27-3</td> <td>27</td> </tr> <tr> <td>SOJ26-P-300-1.27</td> <td>27</td> </tr> <tr> <td>QFJ18-P-R290-1.27</td> <td>35</td> </tr> <tr> <td>QFJ22-P-R290-1.27</td> <td>35</td> </tr> </tbody> </table>	Package Code	Max. CAP ICs/tube	SOJ26/20-P-300-1.27	27	SOJ26/24-P-300-1.27	27	SOJ26/24-P-300-1.27-3	27	SOJ26-P-300-1.27	27	QFJ18-P-R290-1.27	35	QFJ22-P-R290-1.27	35
Package Code	Max. CAP ICs/tube														
SOJ26/20-P-300-1.27	27														
SOJ26/24-P-300-1.27	27														
SOJ26/24-P-300-1.27-3	27														
SOJ26-P-300-1.27	27														
QFJ18-P-R290-1.27	35														
QFJ22-P-R290-1.27	35														
	<p>Tube Drawing No: QSJ-50053 Plate Thickness: 0.6 Length: 495 Material: Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. CAP ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOJ28-P-300-1.27</td> <td>26</td> </tr> </tbody> </table>	Package Code	Max. CAP ICs/tube	SOJ28-P-300-1.27	26										
Package Code	Max. CAP ICs/tube														
SOJ28-P-300-1.27	26														
	<p>Tube Drawing No: QSJ-44499 Plate Thickness: 0.6 Length: 495 Material: Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. CAP ICs/tube</th> </tr> </thead> <tbody> <tr> <td>SOJ26/20-P-350-1.27</td> <td>27</td> </tr> </tbody> </table>	Package Code	Max. CAP ICs/tube	SOJ26/20-P-350-1.27	27										
Package Code	Max. CAP ICs/tube														
SOJ26/20-P-350-1.27	27														

(4) SOJ, QFJ (PLCC)

Unit: mm

	<p>Tube Drawing No: QSJ-44546 Plate Thickness : 0.6 Length : 495 Material : Transparent Hard PVC (anti-static)</p>
	<p>Tube Drawing No: QSJ-44445 Plate Thickness : 0.8 Length : 495 Material : Transparent Hard PVC (anti-static)</p>
	<p>Tube Drawing No: QSJ-44447 Plate Thickness : 0.8 Length : 495 Material : Transparent Hard PVC (anti-static)</p>

Package Code	Max. cap ICs/tube
SOJ28/24-P-400-1.27	25
SOJ28-P-400-1.27	25
SOJ32-P-400-1.27	22
SOJ32-P-400-1.27-1	22
SOJ36-P-400-1.27	19
SOJ40-P-400-1.27	18
SOJ42-P-400-1.27	17
SOJ50-P-400-0.80	22

Package Code	Max. cap ICs/tube
QFJ20-P-S350-1.27	48

Package Code	Max. cap ICs/tube
QFJ28-P-S450-1.27	38

PACKAGE INFORMATION

7. PACKING

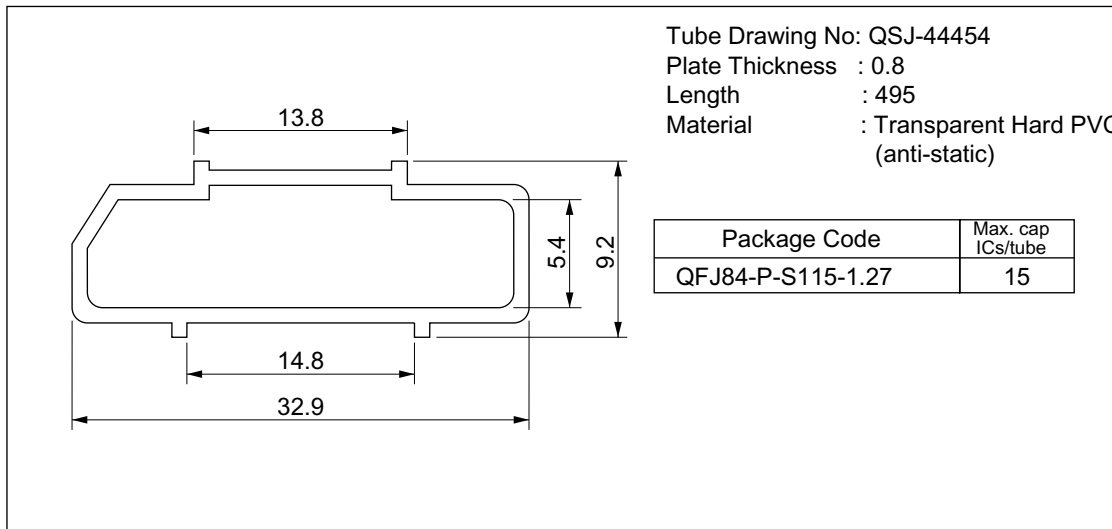
(4) SOJ, QFJ (PLCC)

Unit:mm

	<p>Tube Drawing No: QSJ-44449 Plate Thickness : 0.8 Length : 495 Material : Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>QFJ32-P-R450-1.27</td> <td>32</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	QFJ32-P-R450-1.27	32
Package Code	Max. cap ICs/tube				
QFJ32-P-R450-1.27	32				
	<p>Tube Drawing No: QSJ-44451 Plate Thickness : 0.8 Length : 495 Material : Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>QFJ44-P-S650-1.27</td> <td>26</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	QFJ44-P-S650-1.27	26
Package Code	Max. cap ICs/tube				
QFJ44-P-S650-1.27	26				
	<p>Tube Drawing No: QSJ-44453 Plate Thickness : 0.8 Length : 495 Material : Transparent Hard PVC (anti-static)</p> <table border="1"> <thead> <tr> <th>Package Code</th> <th>Max. cap ICs/tube</th> </tr> </thead> <tbody> <tr> <td>QFJ68-P-S950-1.27</td> <td>18</td> </tr> </tbody> </table>	Package Code	Max. cap ICs/tube	QFJ68-P-S950-1.27	18
Package Code	Max. cap ICs/tube				
QFJ68-P-S950-1.27	18				

(4) SOJ, QFJ (PLCC)

Unit: mm

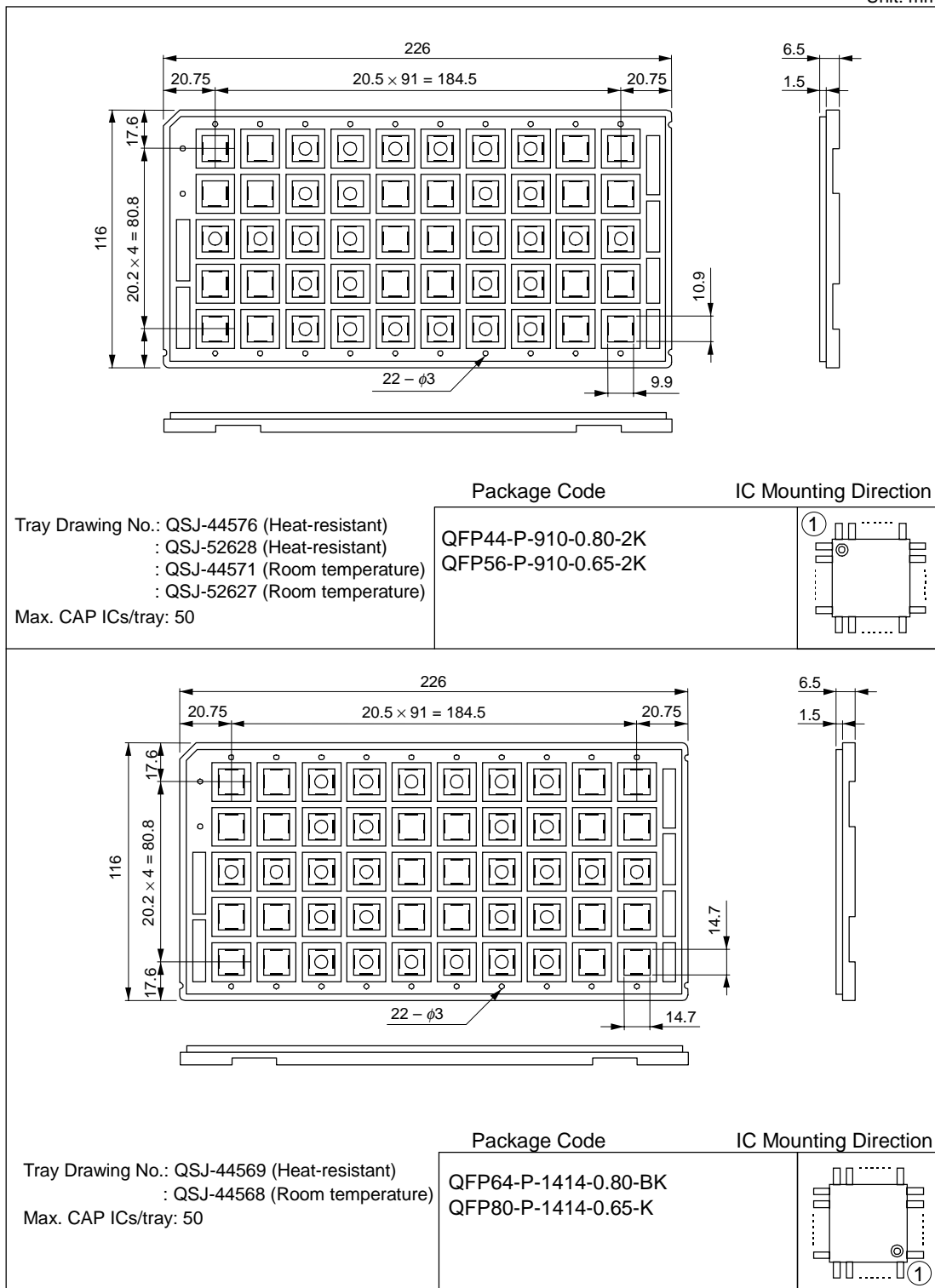


PACKAGE INFORMATION

7. PACKING

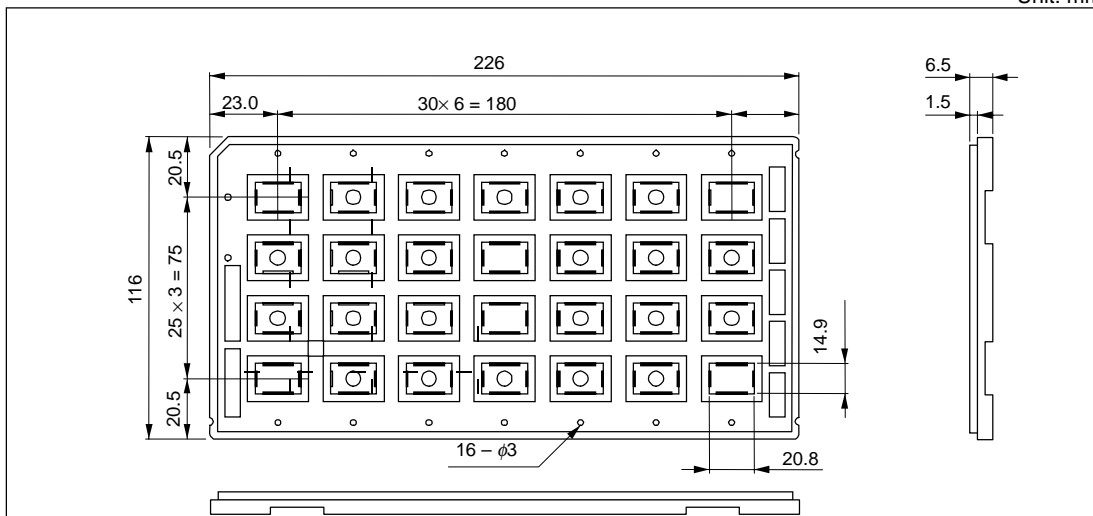
7.2.2 Trays

Unit: mm



Note: The IC mounting direction shows how pins of a device is alignend in the tray pocket.

Unit: mm



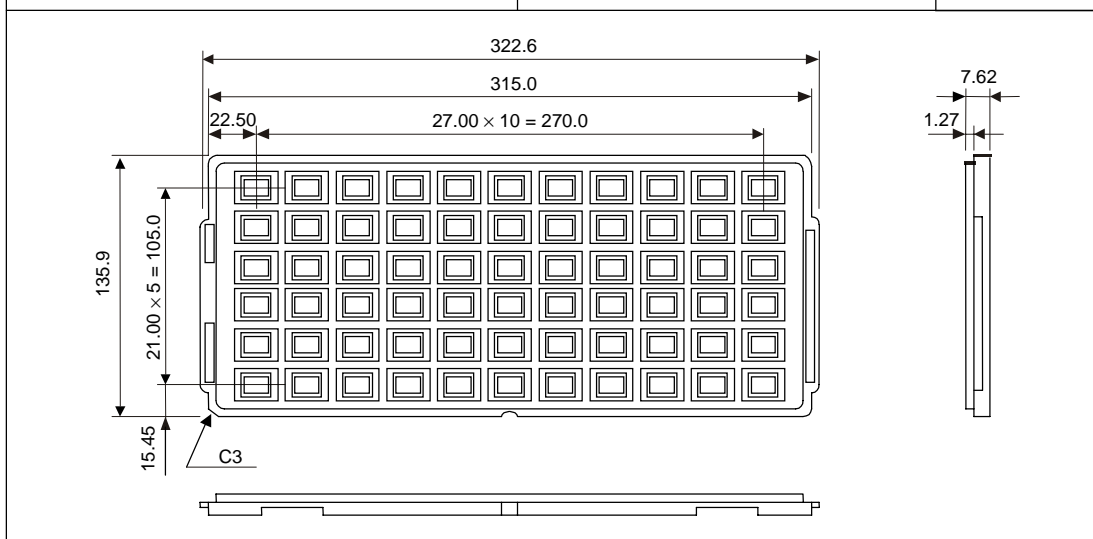
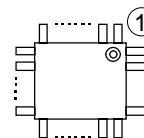
Tray Drawing No.: QSJ-44575 (Heat-resistant)
: QSJ-50174 (Heat-resistant)
: QSJ-44574 (Room temperature)

Max. CAP ICs/tray: 28

Package Code

SSOP60-P-700-0.65-BK
QFP64-P-1420-1.00-BK
QFP80-P-1420-0.80-BK
QFP100-P-1420-0.65-BK

IC Mounting Direction



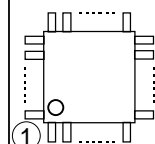
In conformance with standards of EIAJ, JEDEC
Tray Drawing No.: QSJ-50286 (Heat-resistant)
: QSJ-50300 (Room temperature)

Max. CAP ICs/tray: 66

Package Code

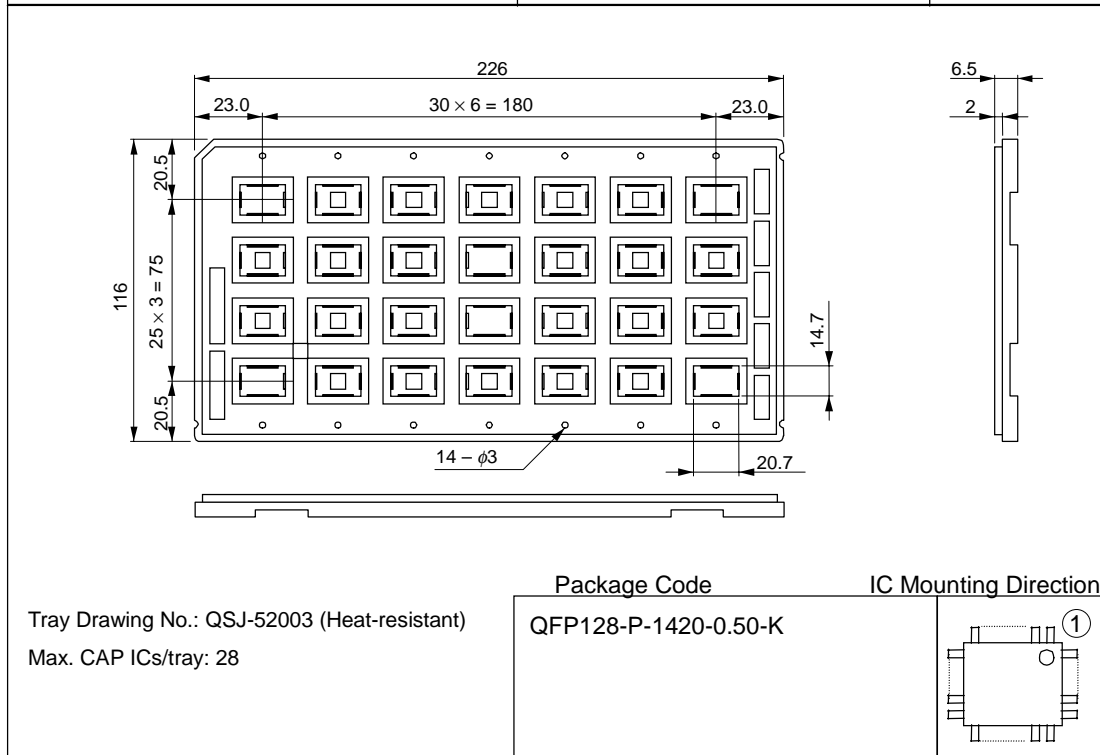
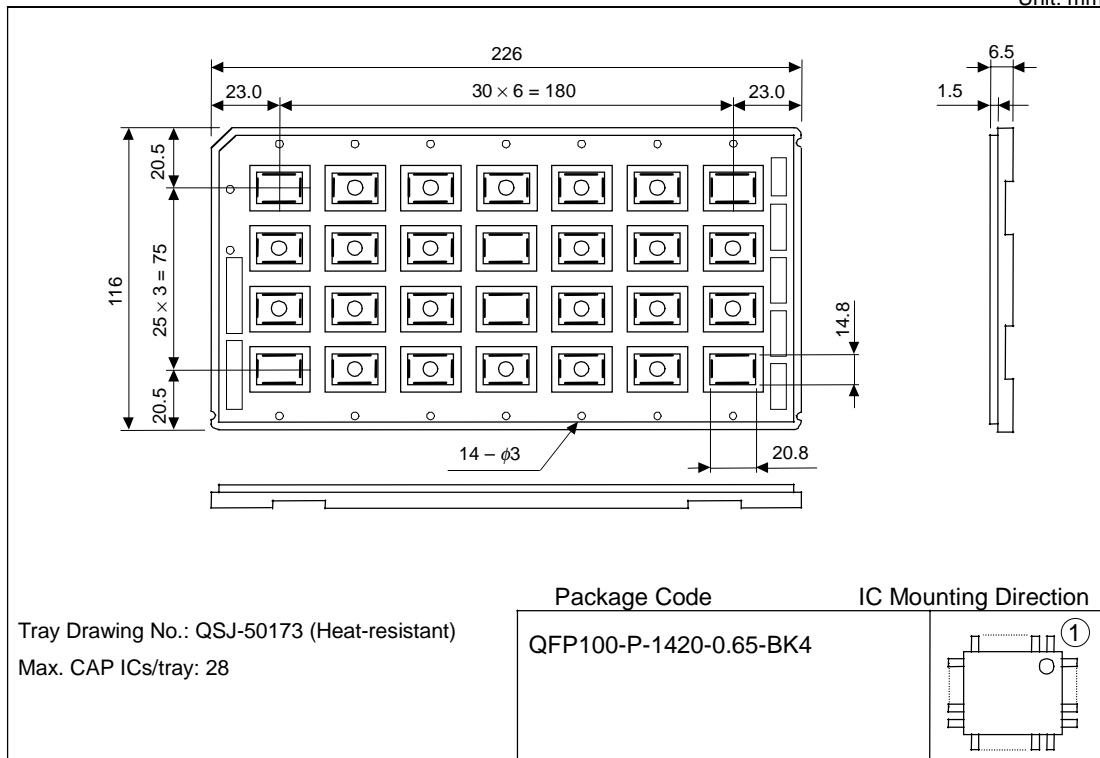
SSOP60-P-700-0.65-BK
QFP64-P-1420-1.00-BK
QFP80-P-1420-0.80-BK
QFP100-P-1420-0.65-BK
QFP100-P-1420-0.65-BK4

IC Mounting Direction



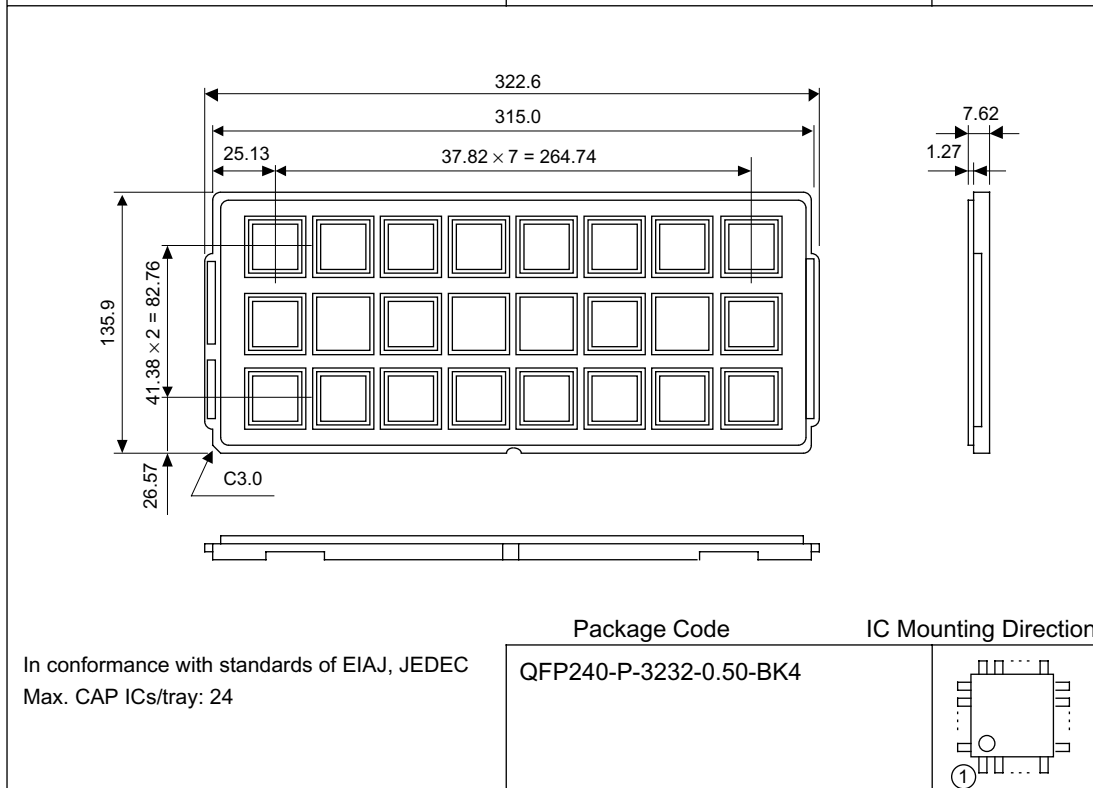
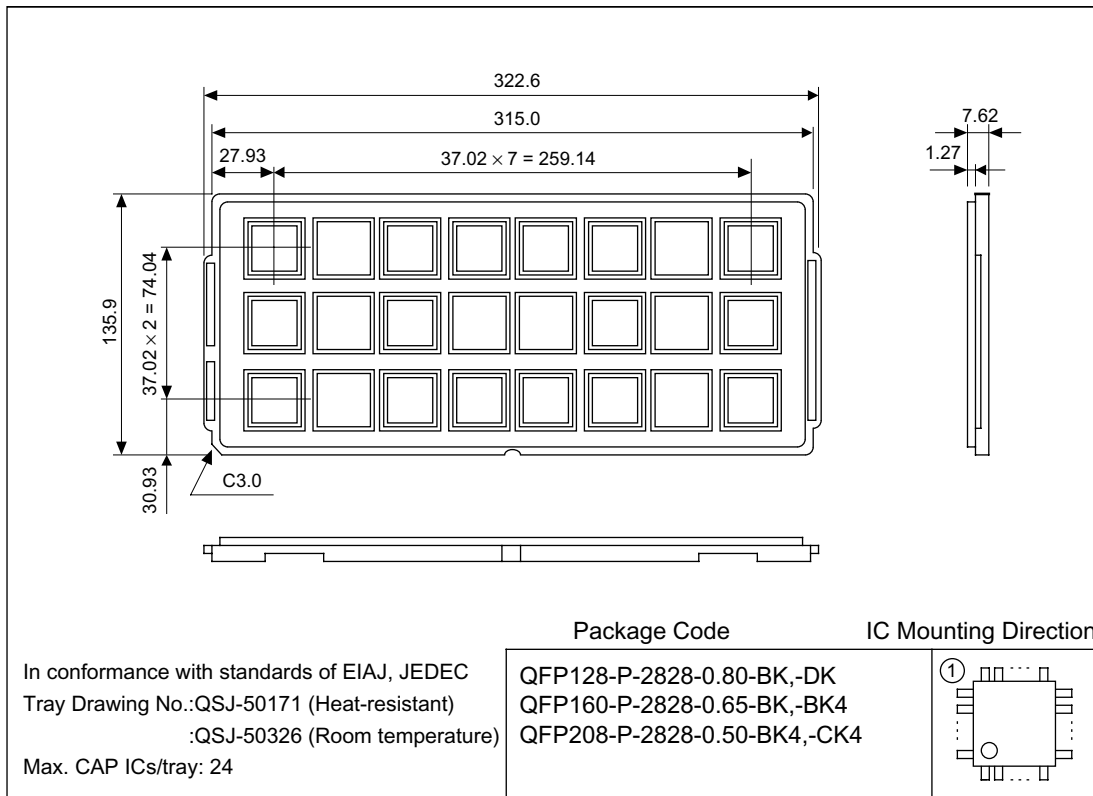
PACKAGE INFORMATION
7. PACKING

Unit: mm



PACKAGE INFORMATION
7. PACKING

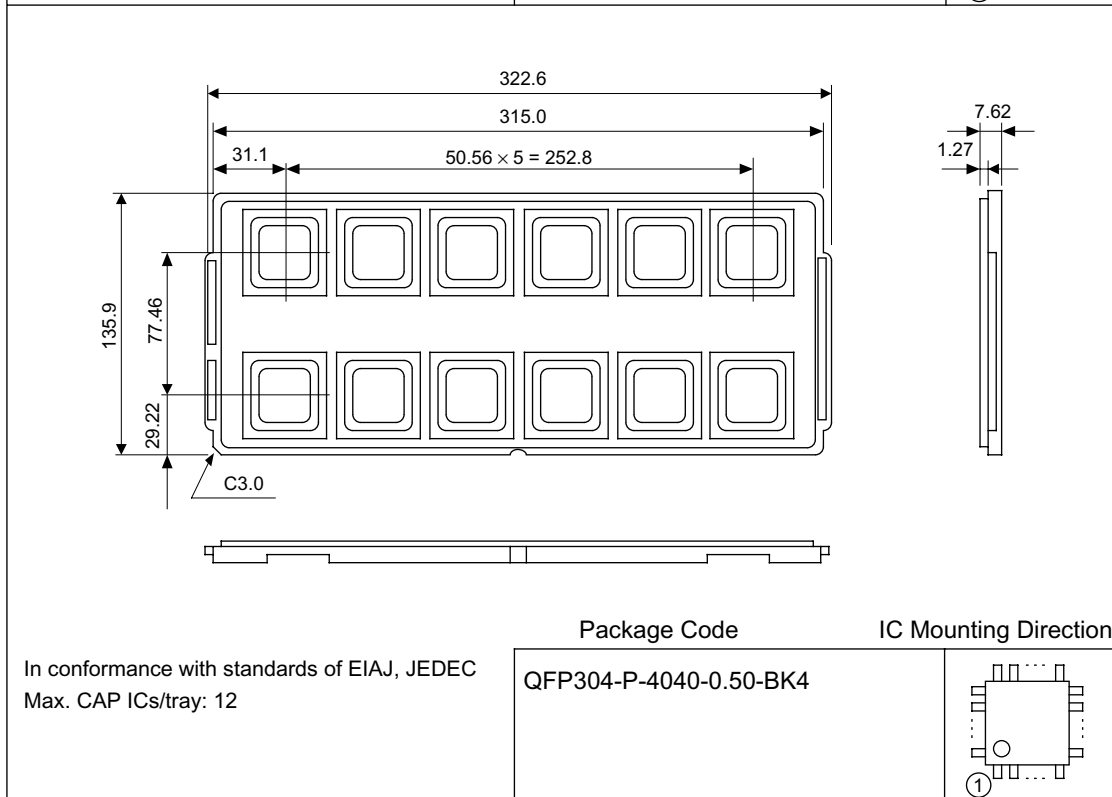
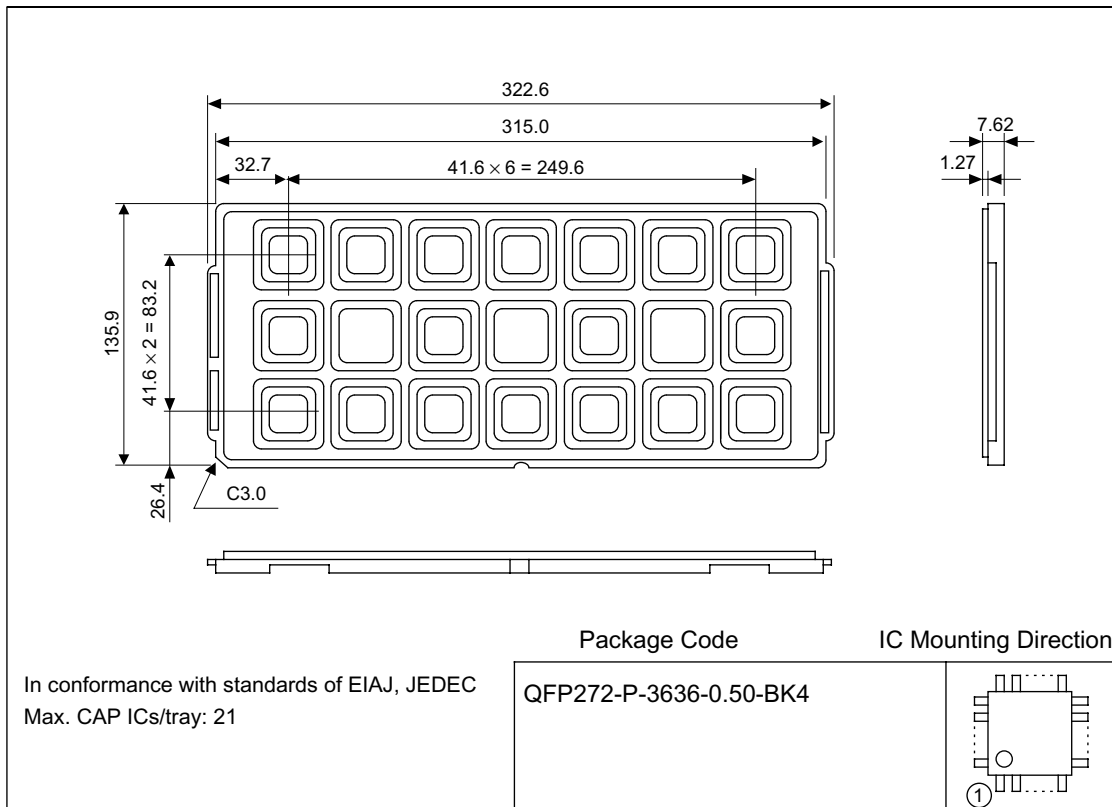
Unit: mm



PACKAGE INFORMATION

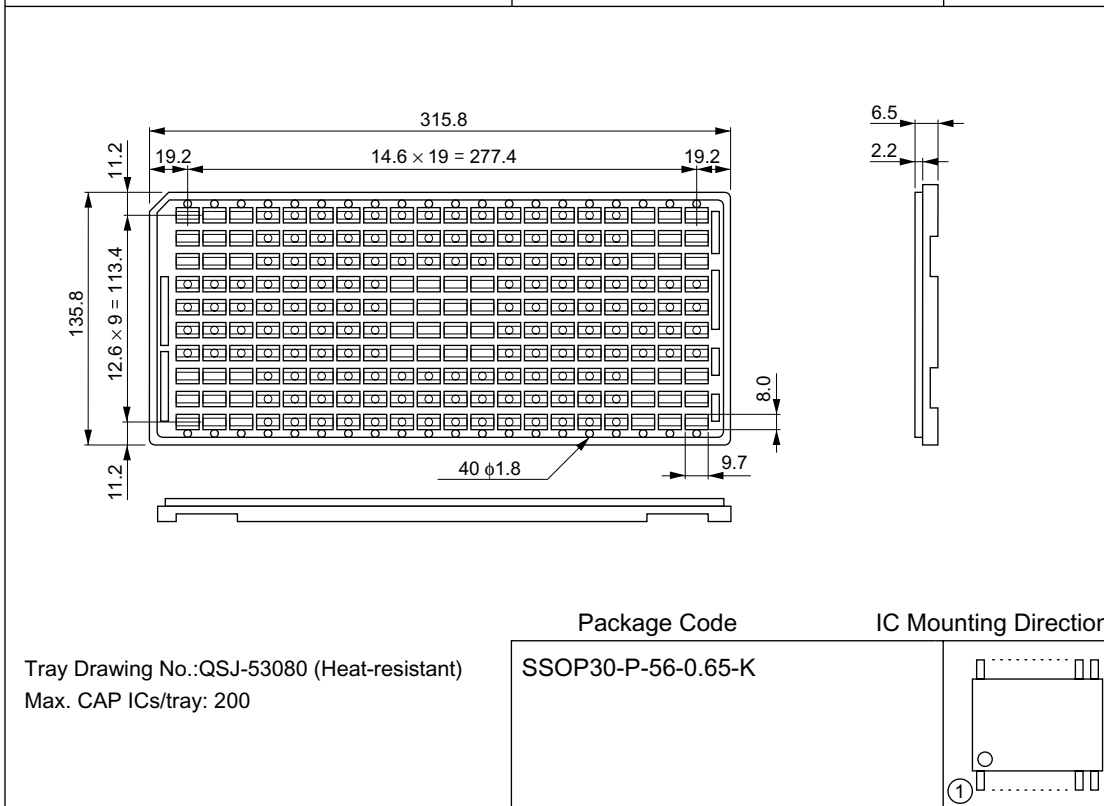
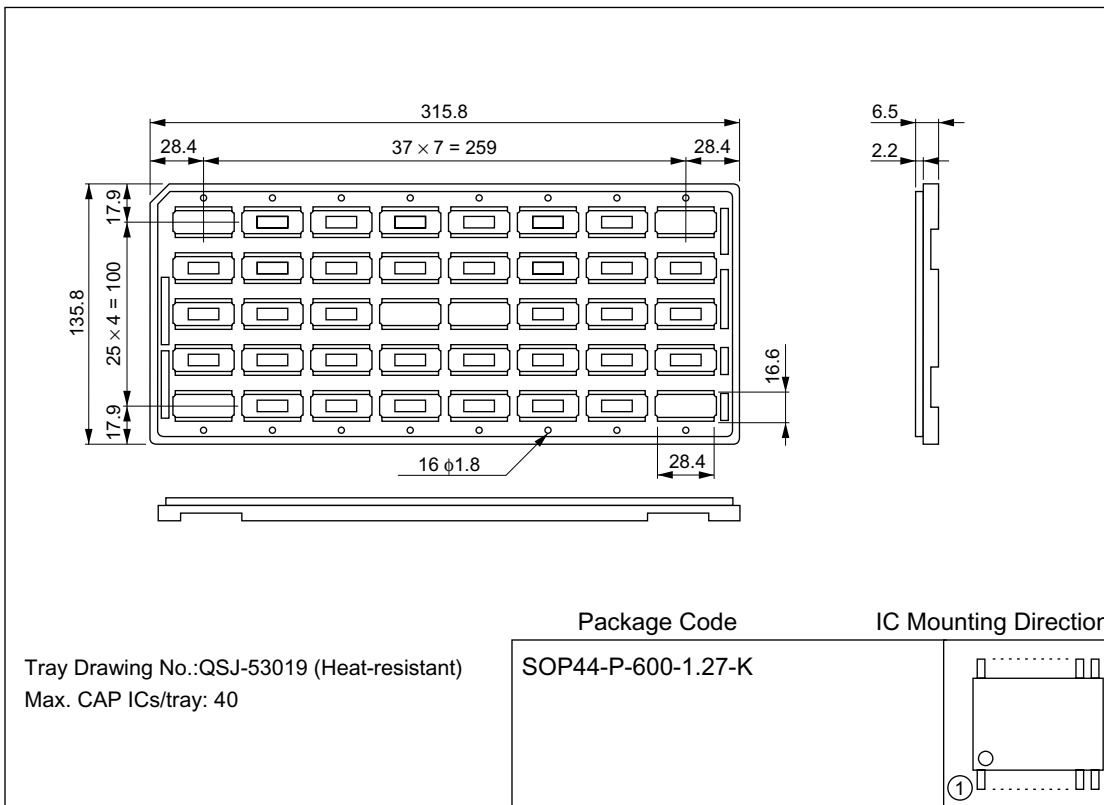
7. PACKING

Unit: mm



PACKAGE INFORMATION
7. PACKING

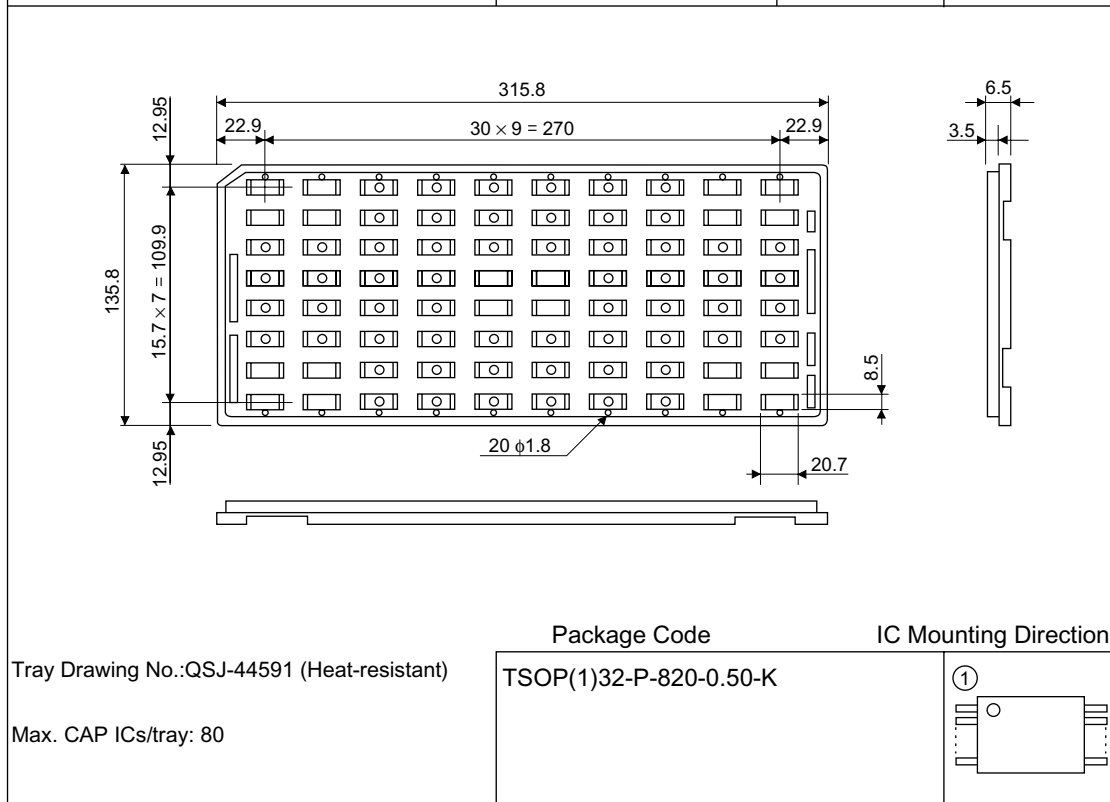
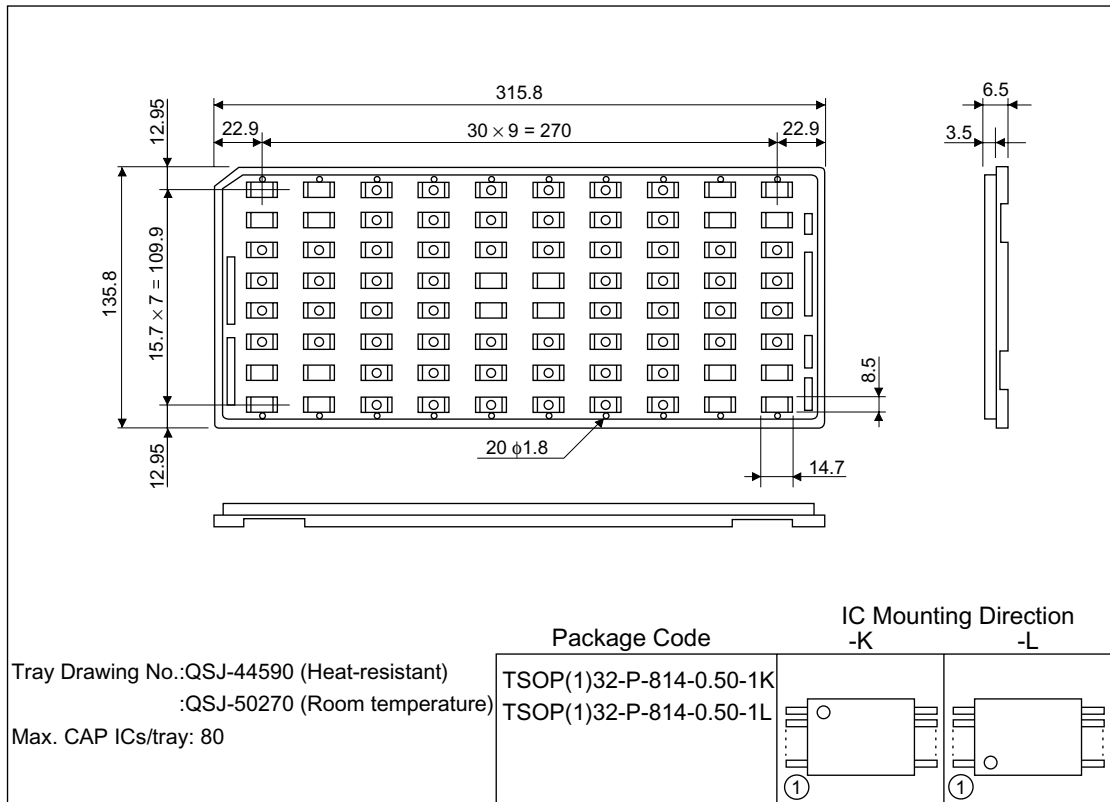
Unit: mm



PACKAGE INFORMATION

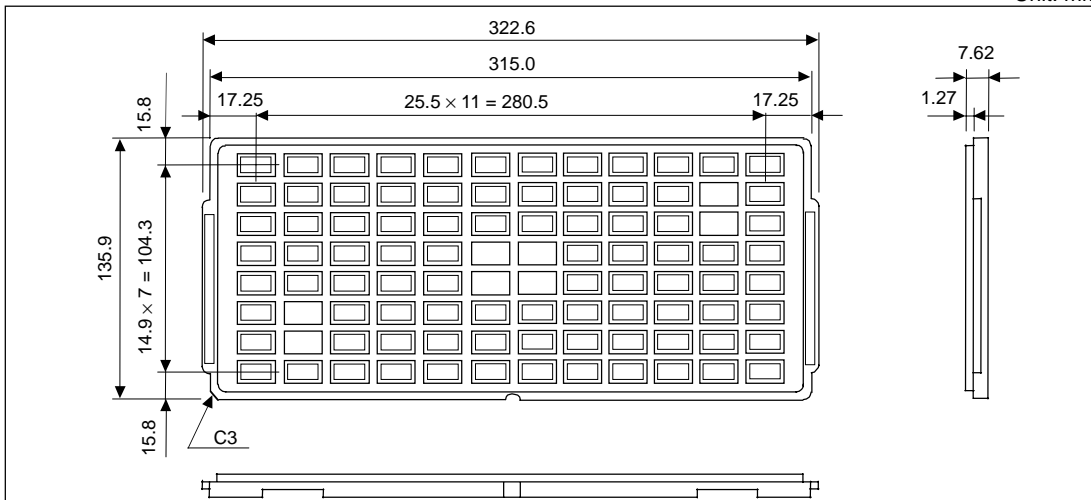
7. PACKING

Unit: mm



PACKAGE INFORMATION
7. PACKING

Unit: mm

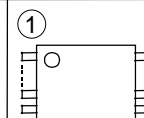


In conformance with standards of EIAJ, JEDEC
(Heat-resistant)
Max. CAP ICs/tray: 96

Package Code

TSOP(1)48-P-1220-0.50-1K

IC Mounting Direction

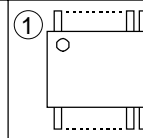
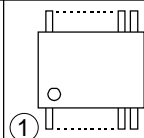


Tray Drawing No.: QSJ-53094
(Heat-resistant)
: QSJ-50265
(Room temperature)
Max. CAP ICs/tray: 80

Package Code

TSOP(2)26/20-P-300-1.27-K
TSOP(2)26/20-P-300-1.27-L
TSOP(2)26/24-P-300-1.27-K
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TSOP(2)26/24-P-300-1.27-L

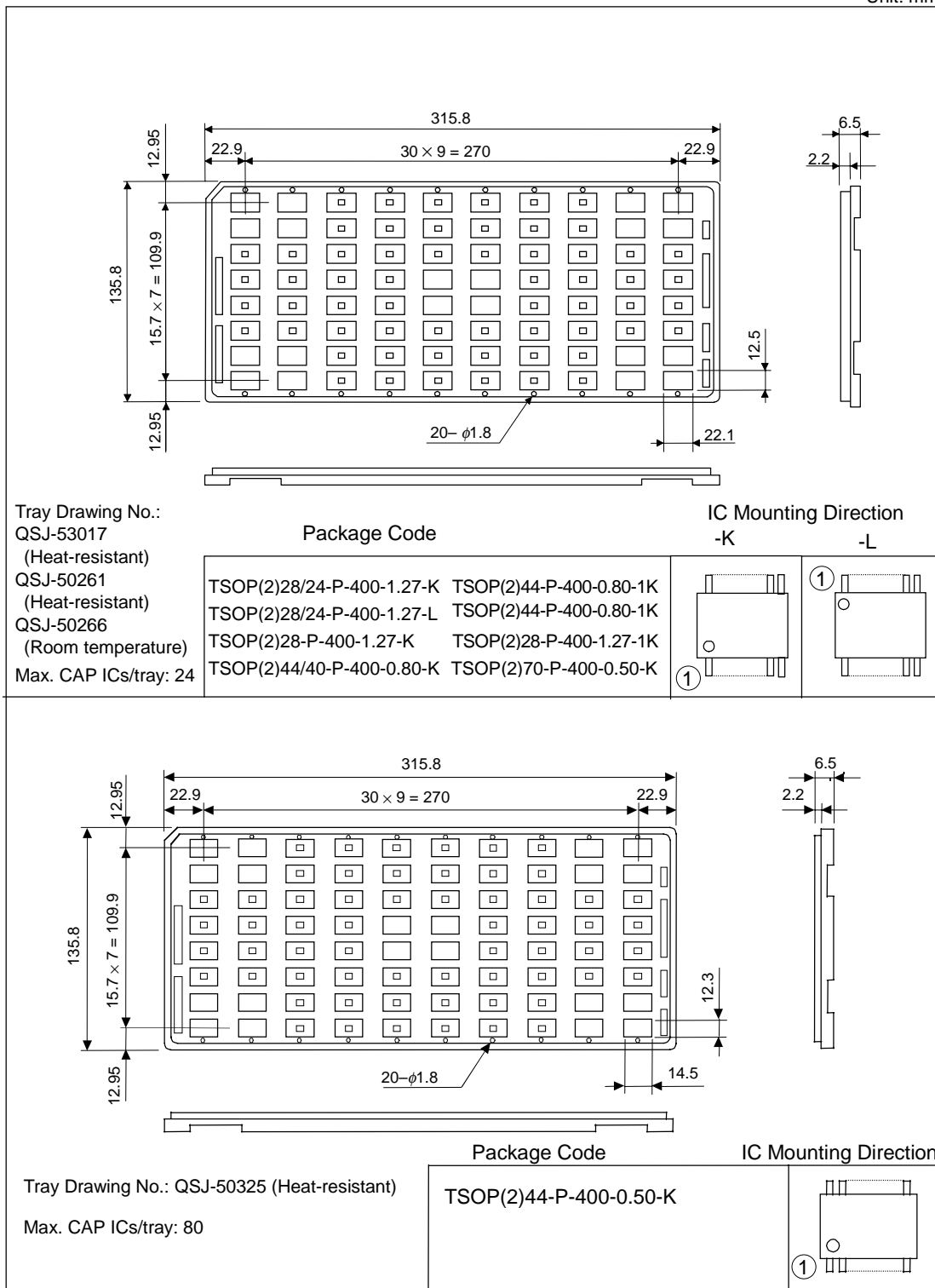
IC Mounting Direction
-K -L



PACKAGE INFORMATION

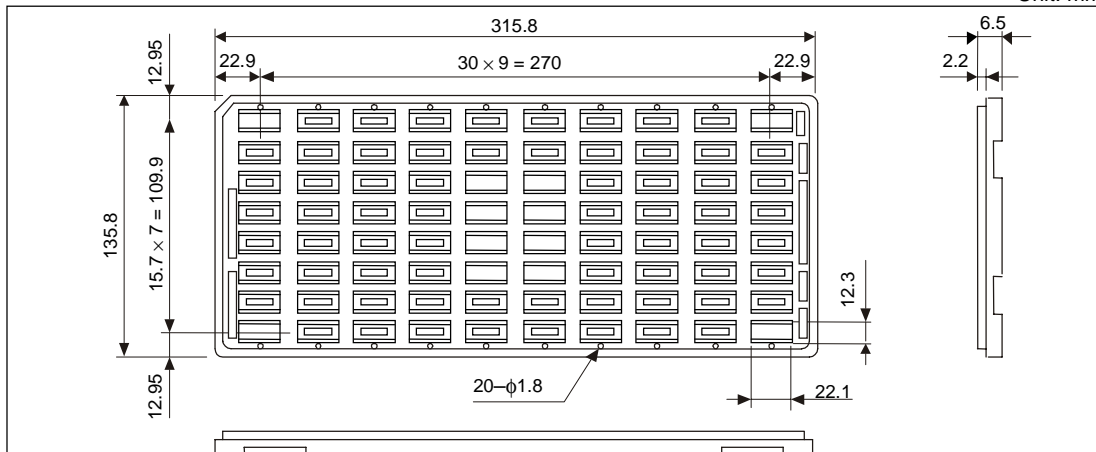
7. PACKING

Unit: mm



PACKAGE INFORMATION
7. PACKING

Unit: mm



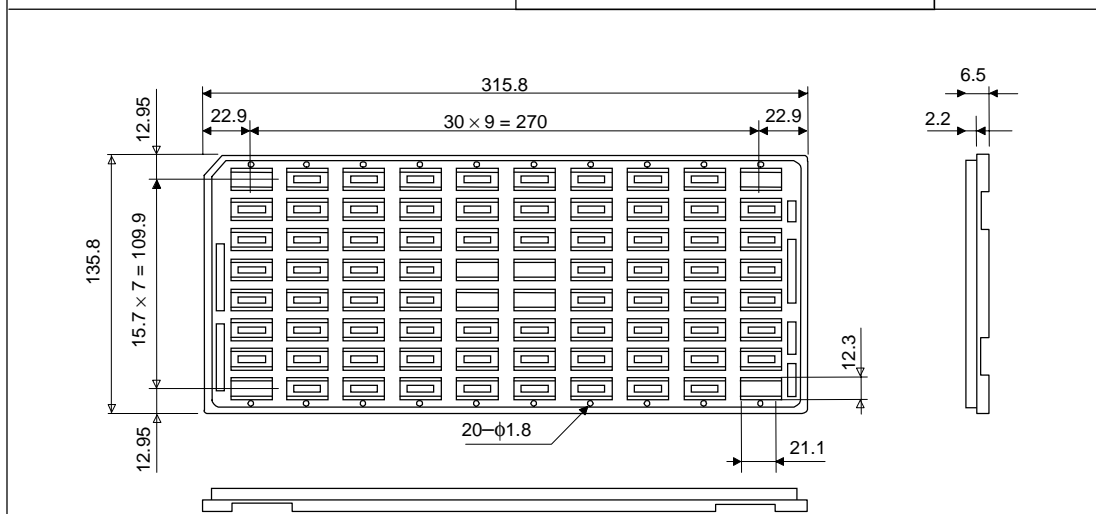
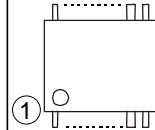
Tray Drawing No.: QSJ-50150 (Heat-resistant)
: QSJ-50269 (Room temperature)

Max. CAP ICs/tray: 80

Package Code

TSOP(2)54-P-400-0.80-K
TSOP(2)66-P-400-0.65-K
TSOP(2)86-P-400-0.50-K

IC Mounting Direction



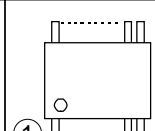
Tray Drawing No.: QSJ-53090 (Heat-resistant)
: QSJ-50267 (Room temperature)

Max. CAP ICs/tray: 80

Package Code

TSOP(2)32-P-400-1.27-K
TSOP(2)50/44-P-400-0.80-K
TSOP(2)50/44-P-400-0.80-1K
TSOP(2)50-P-400-0.80-K
TSOP(2)50-P-400-0.80-1K

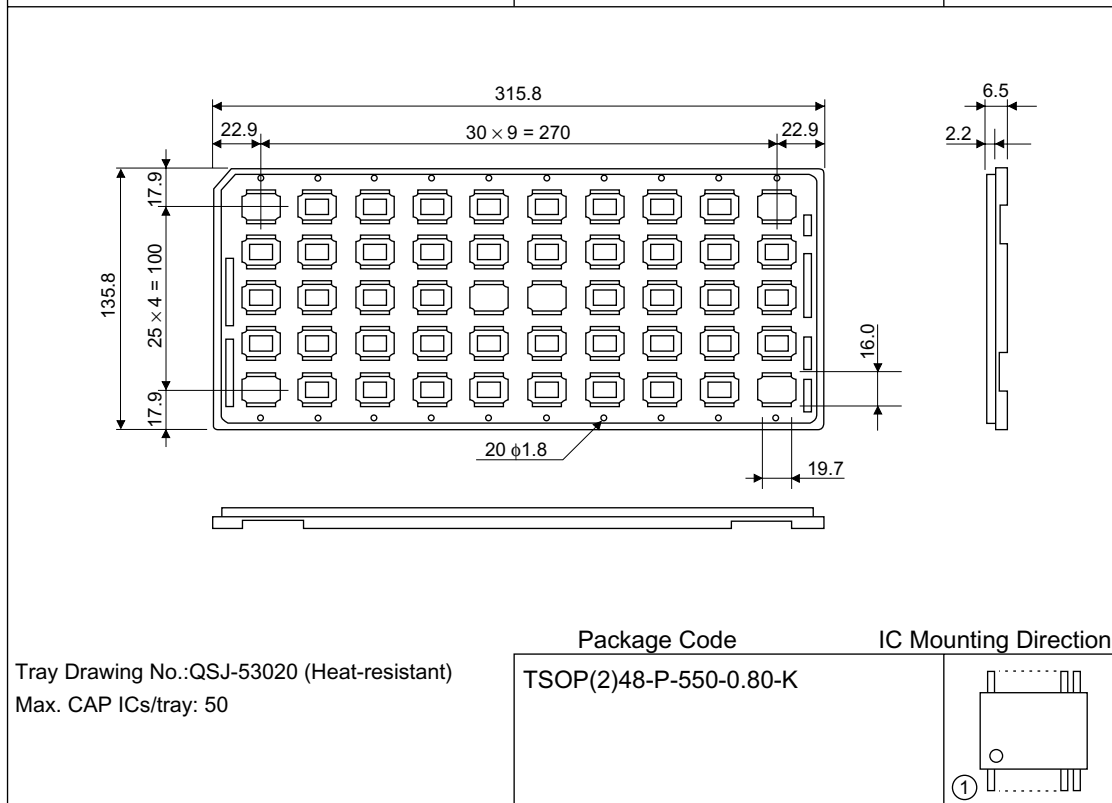
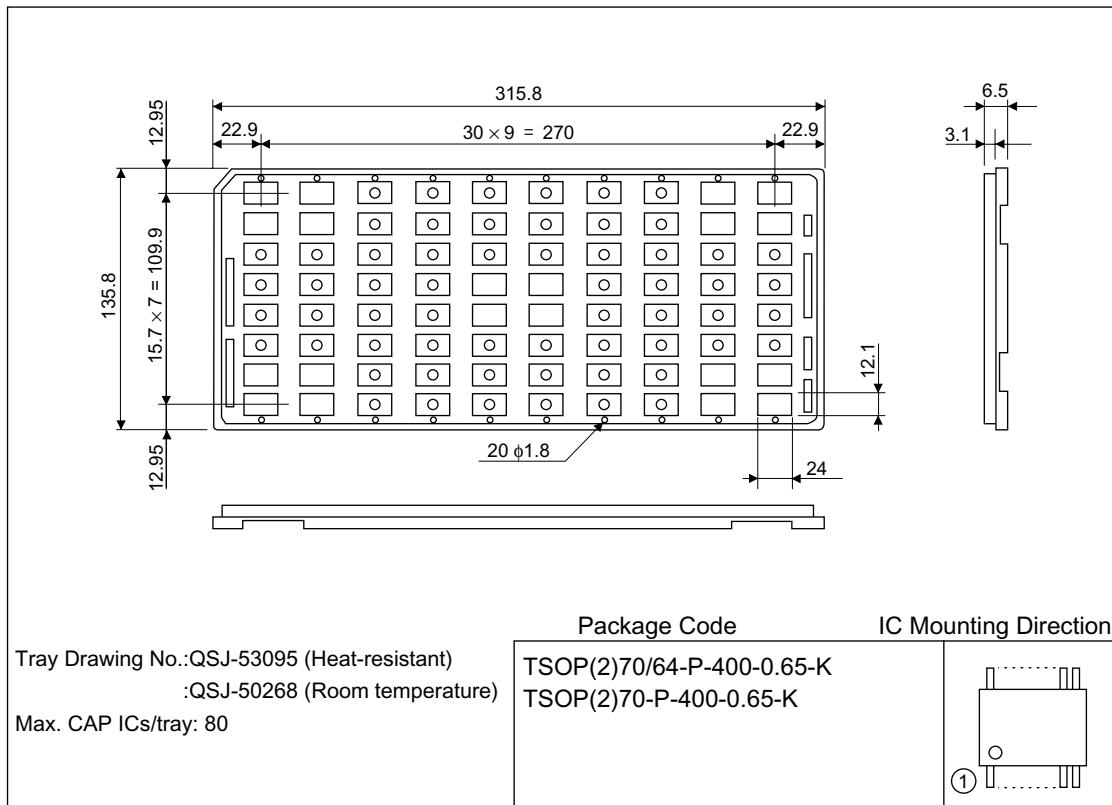
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PACKAGE INFORMATION

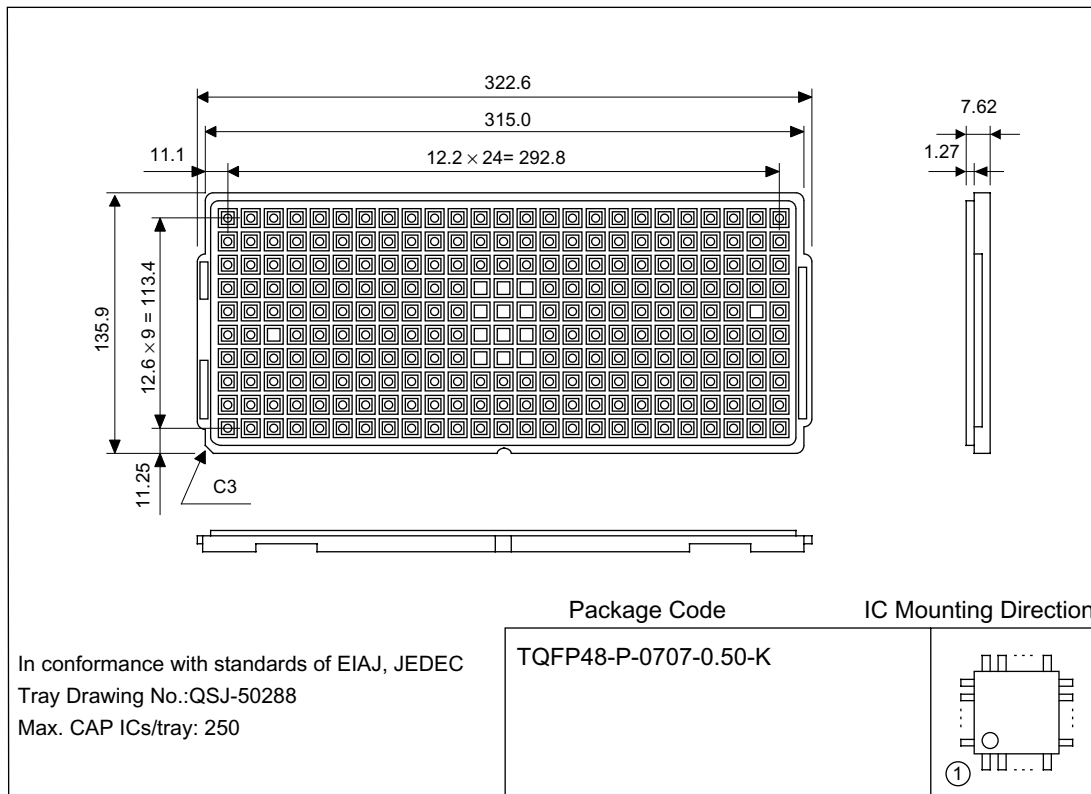
7. PACKING

Unit: mm



PACKAGE INFORMATION
7. PACKING

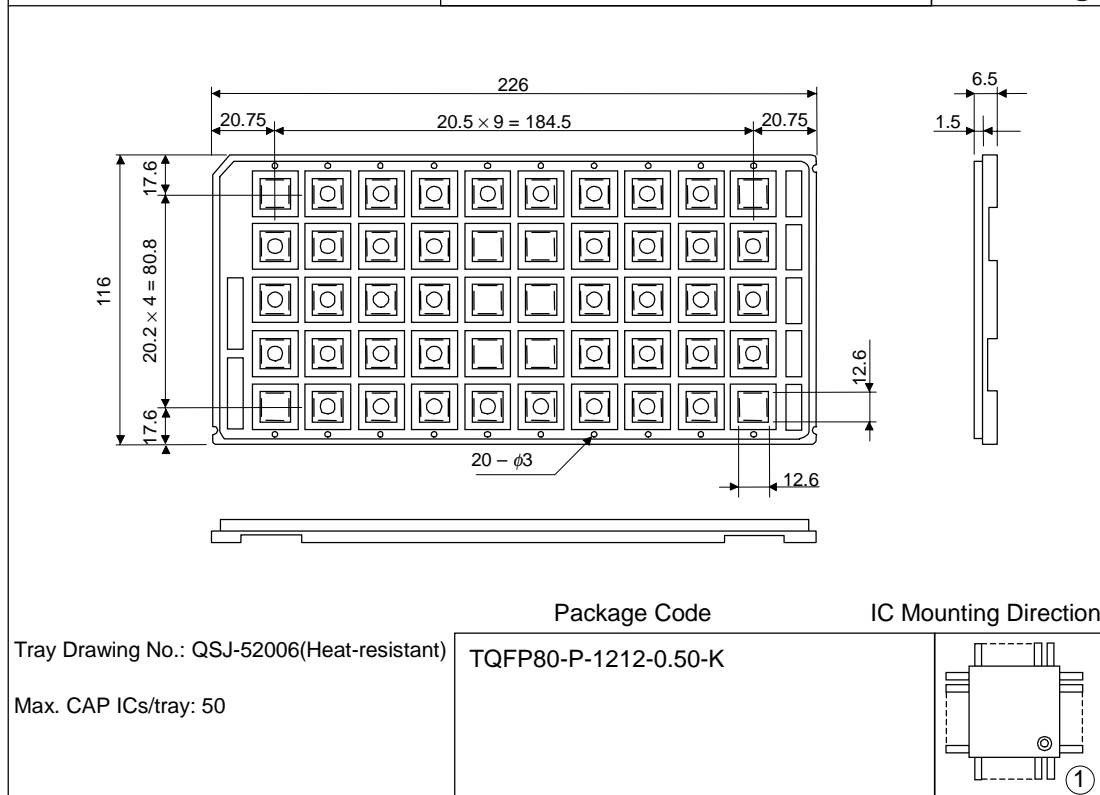
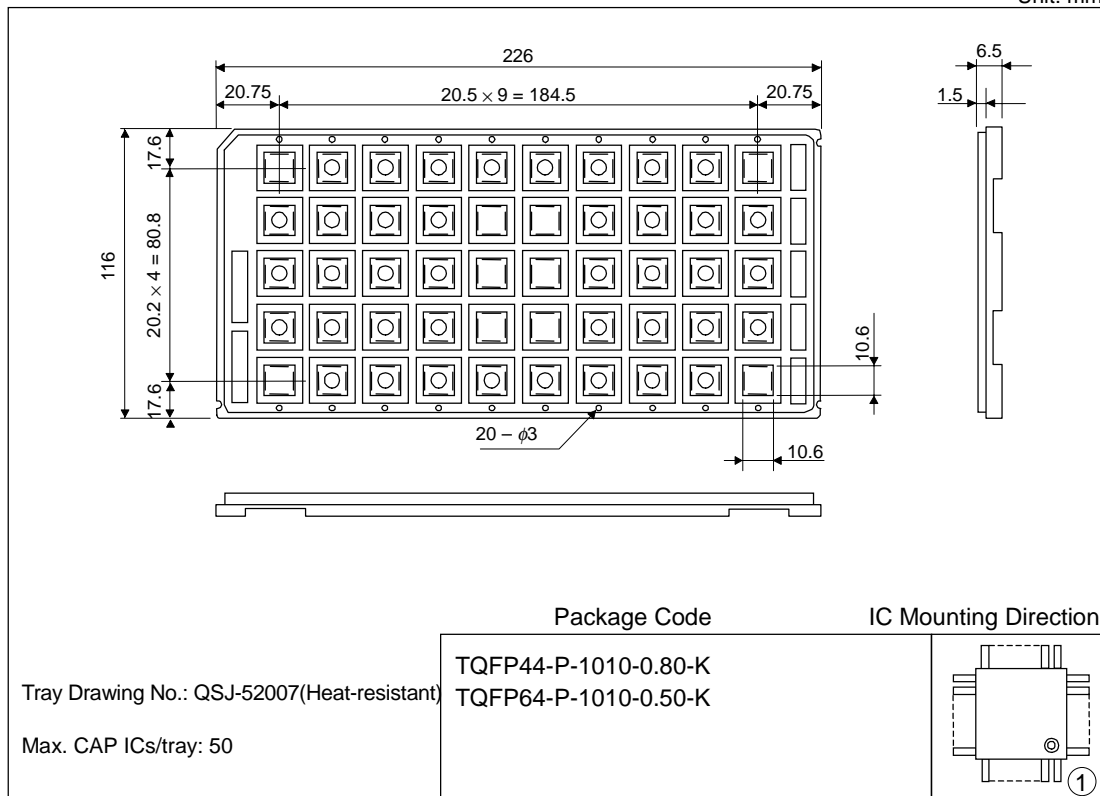
Unit: mm



PACKAGE INFORMATION

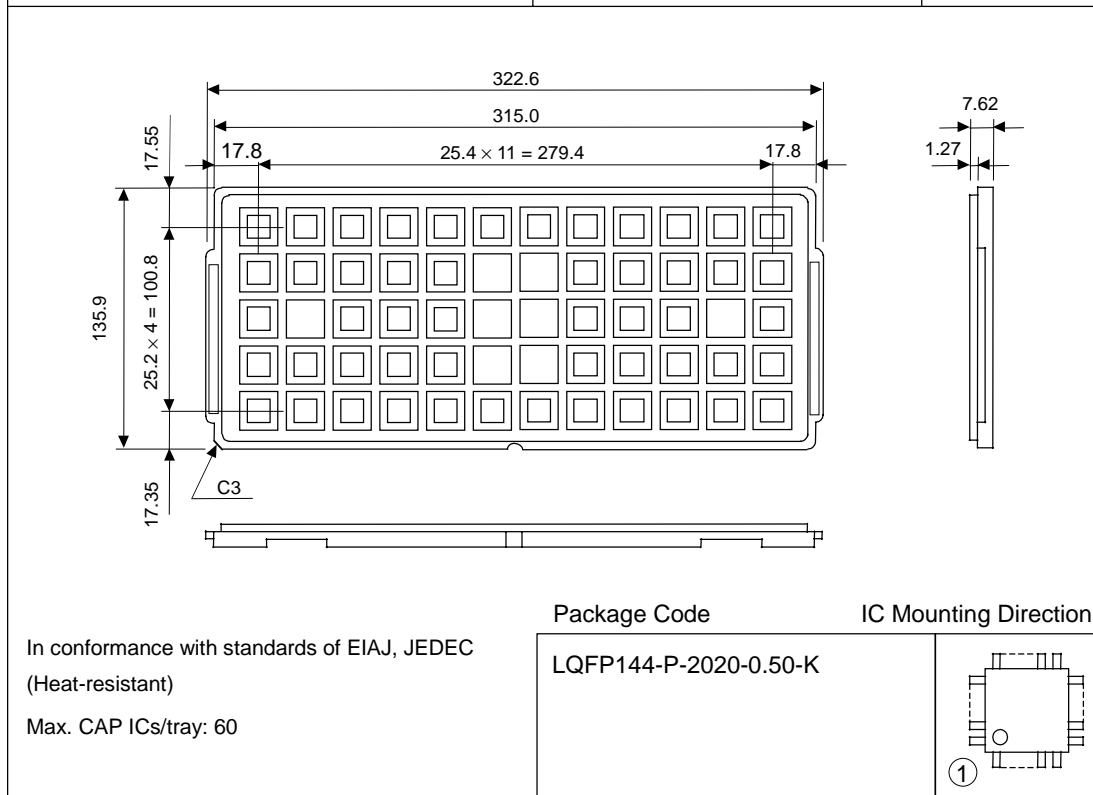
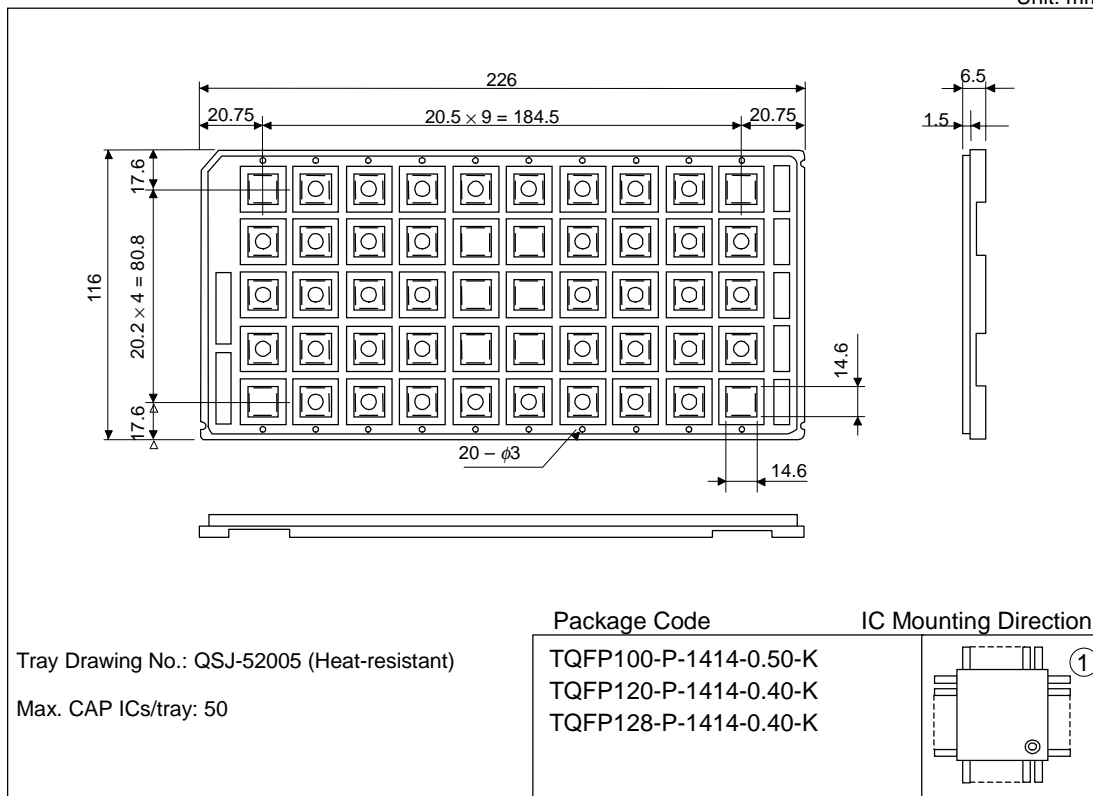
7. PACKING

Unit: mm



PACKAGE INFORMATION
7. PACKING

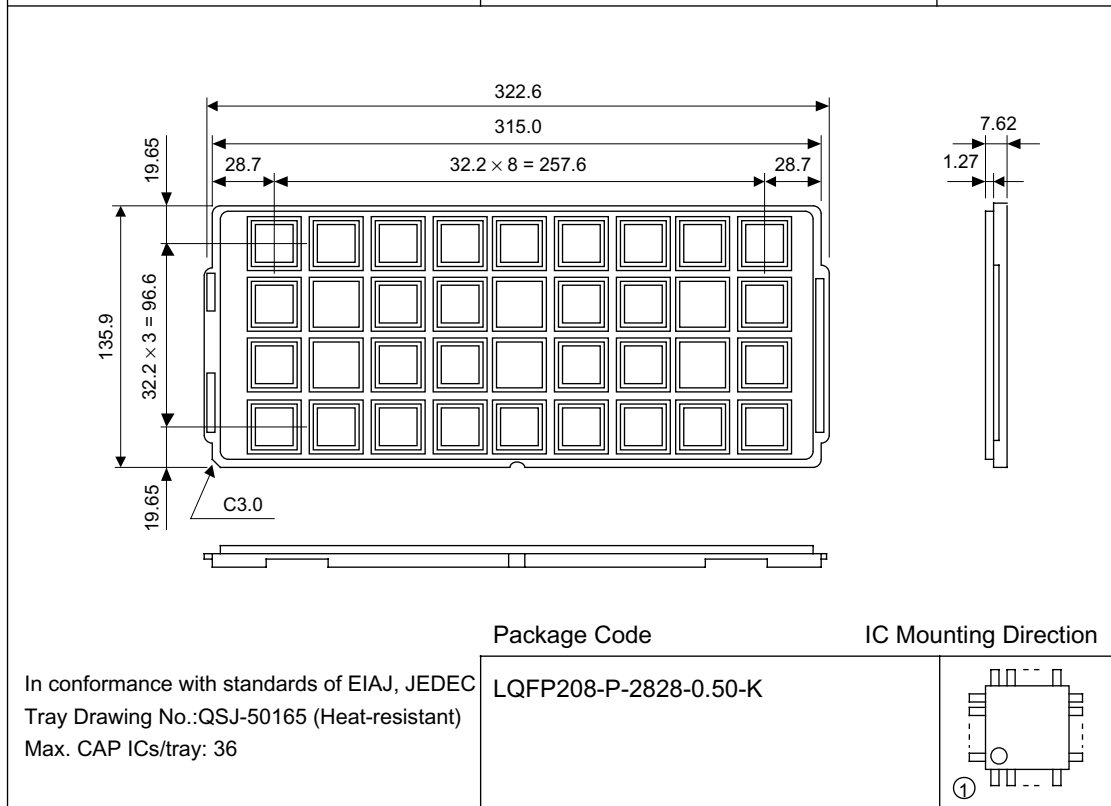
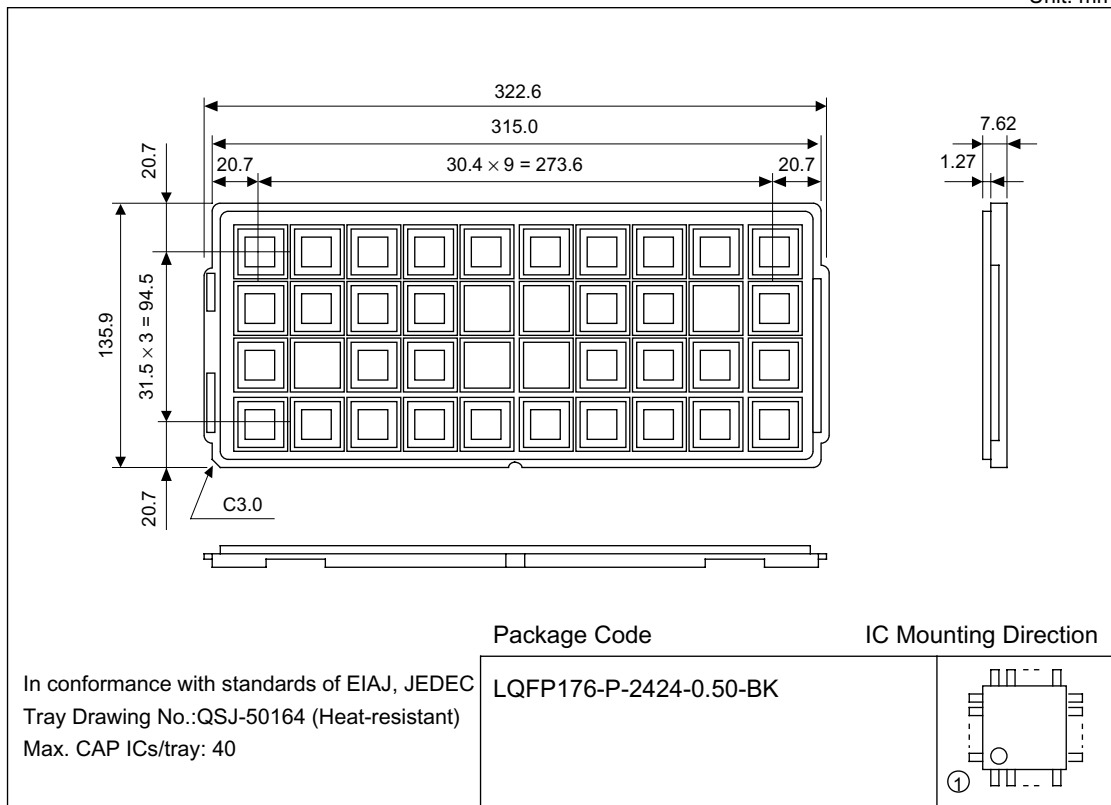
Unit: mm



PACKAGE INFORMATION

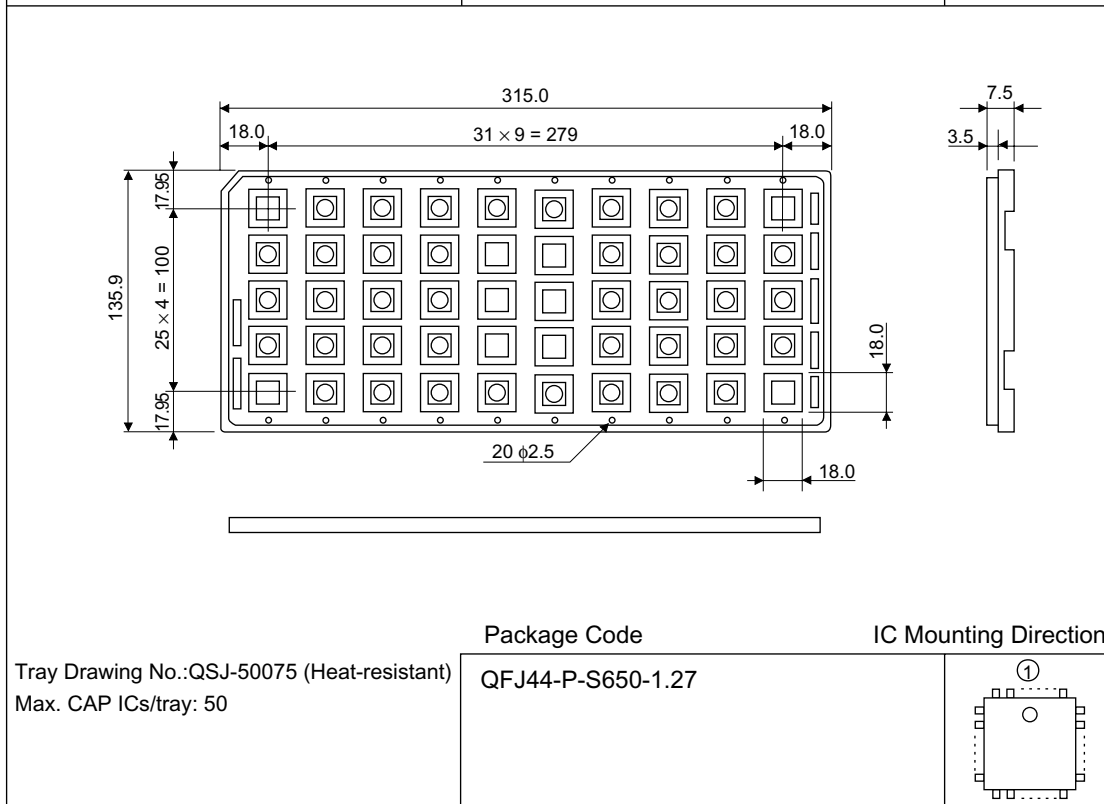
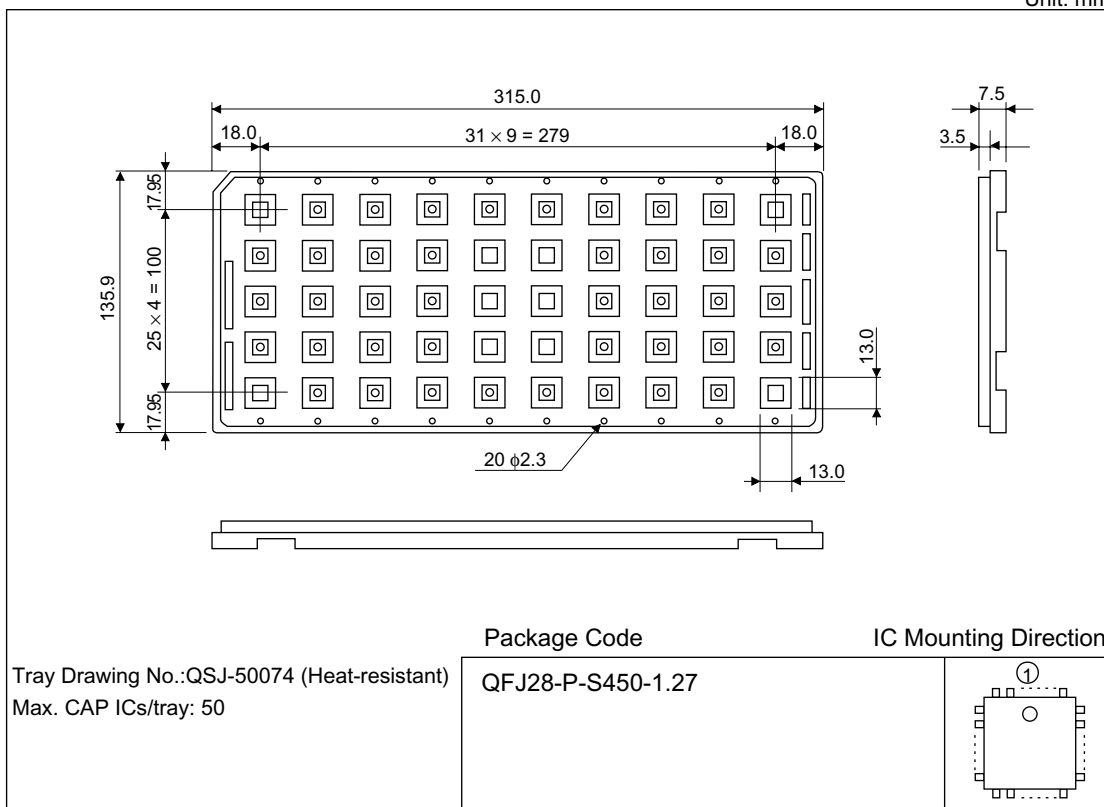
7. PACKING

Unit: mm



PACKAGE INFORMATION
7. PACKING

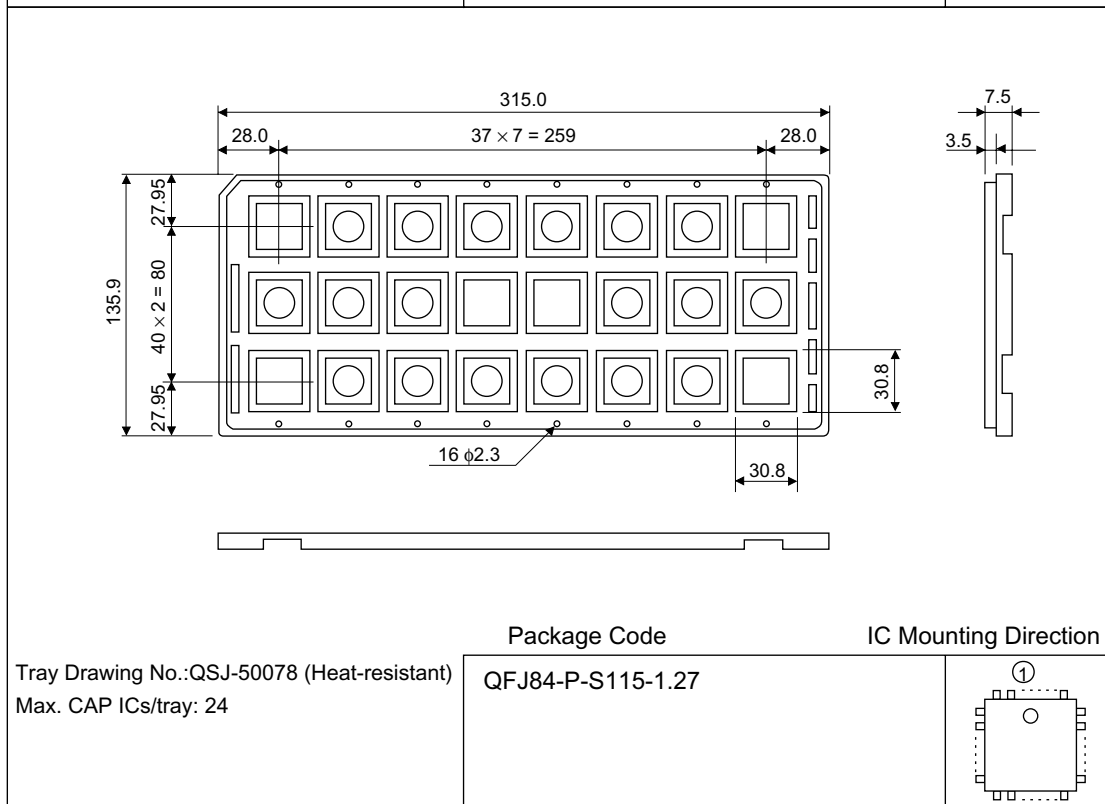
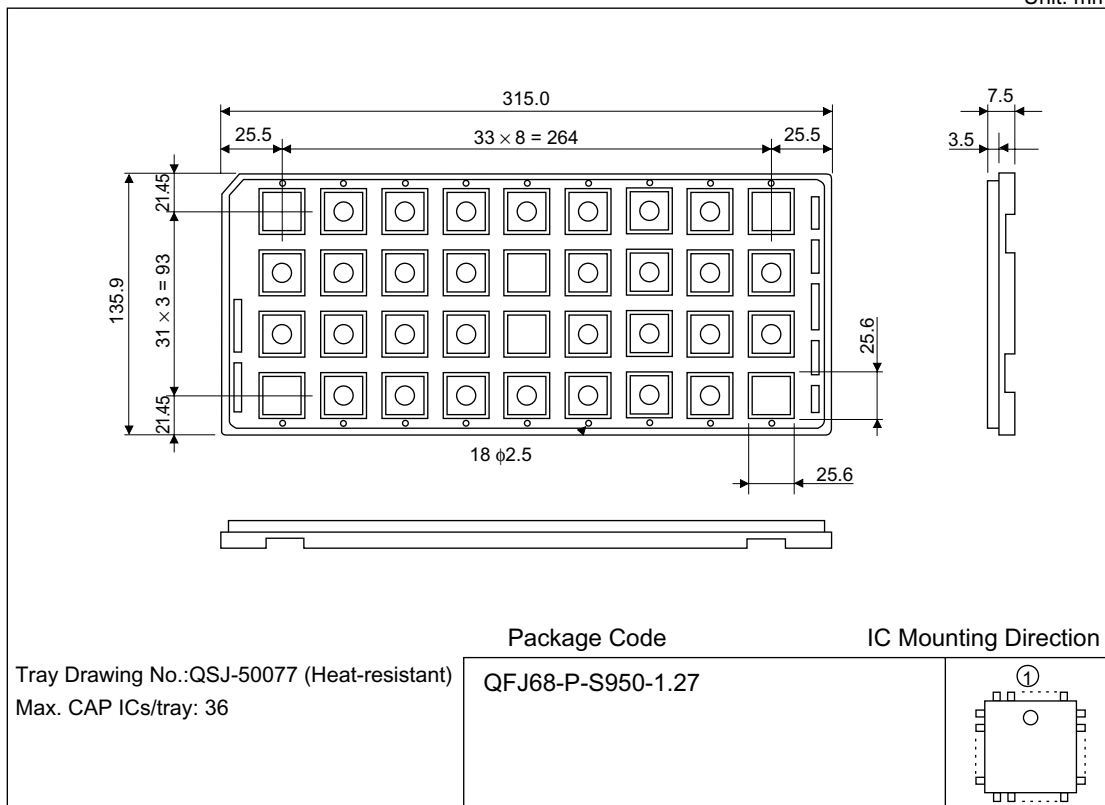
Unit: mm



PACKAGE INFORMATION

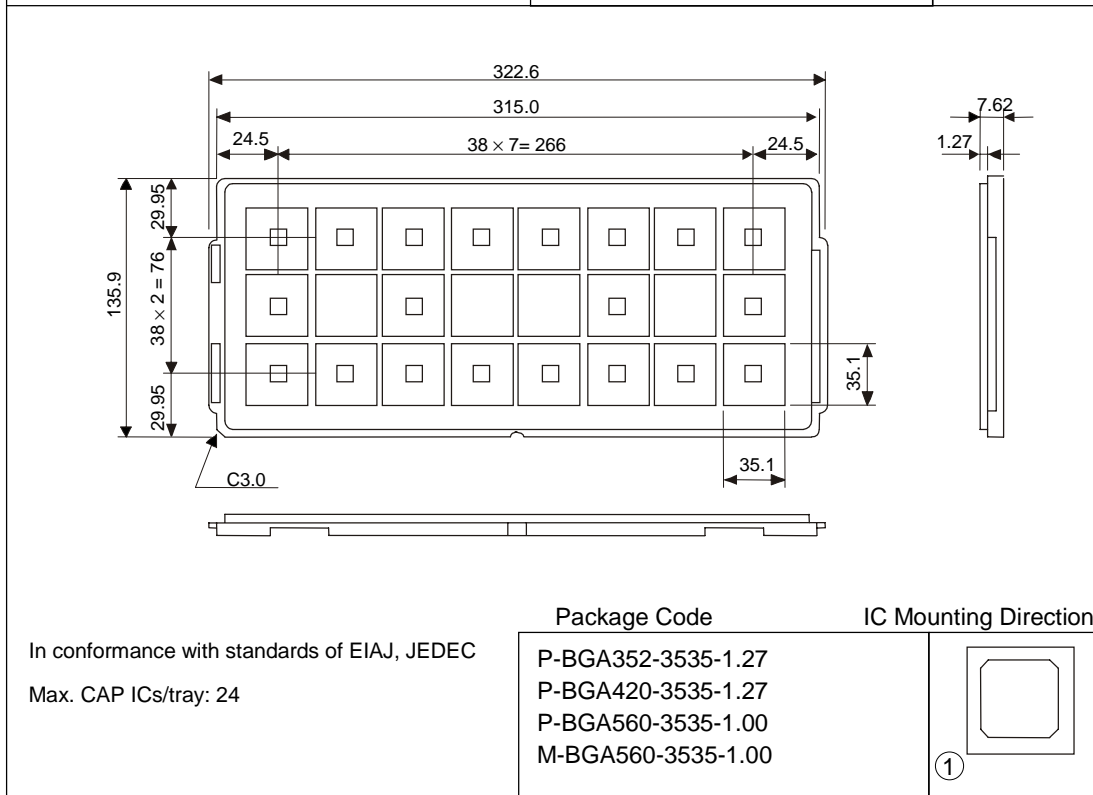
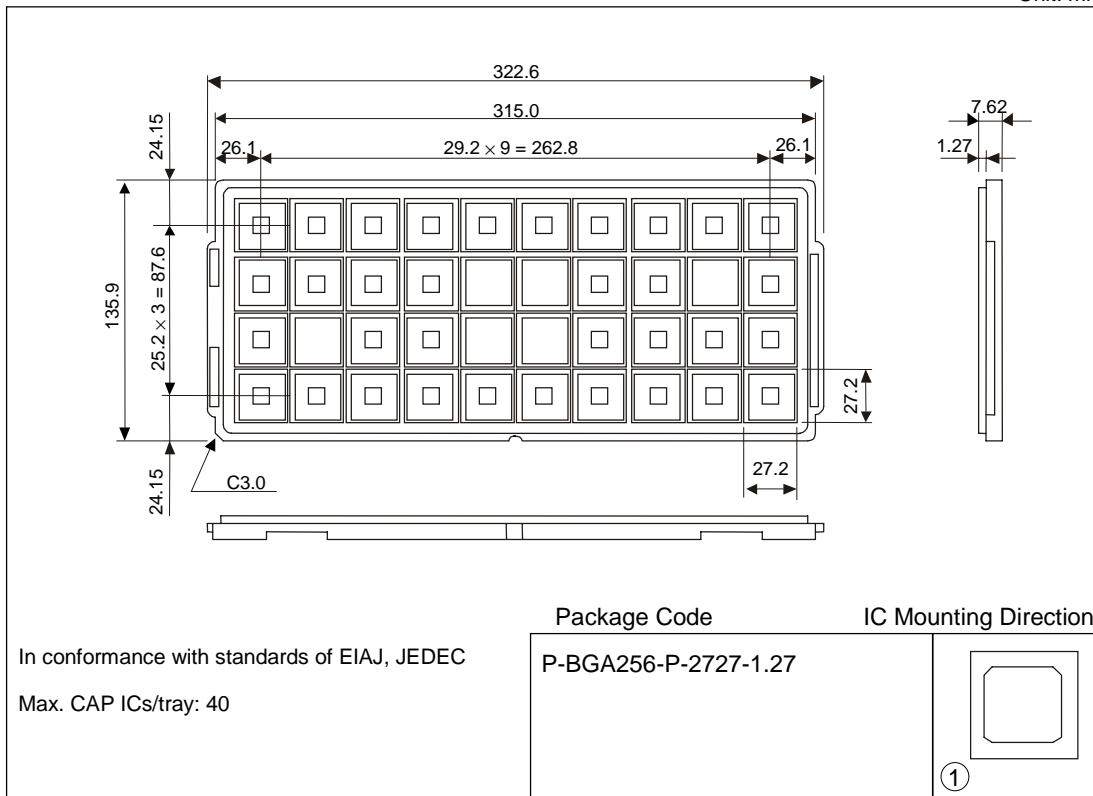
7. PACKING

Unit: mm



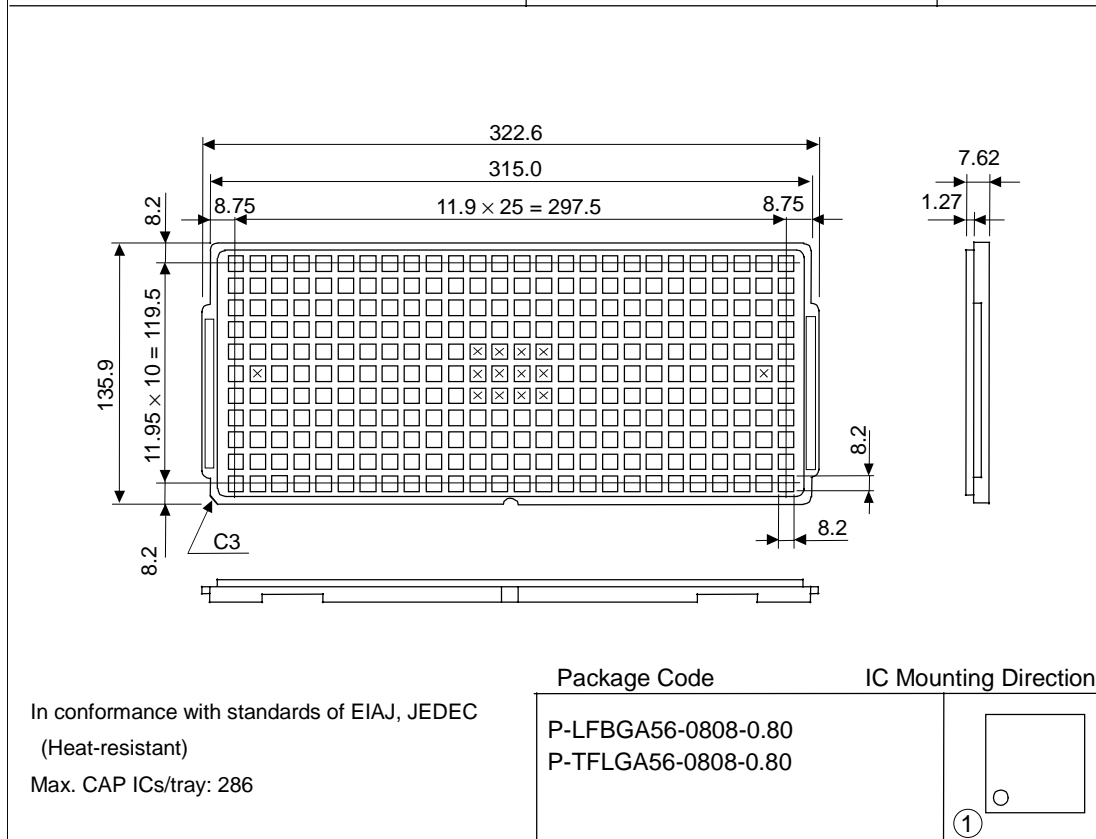
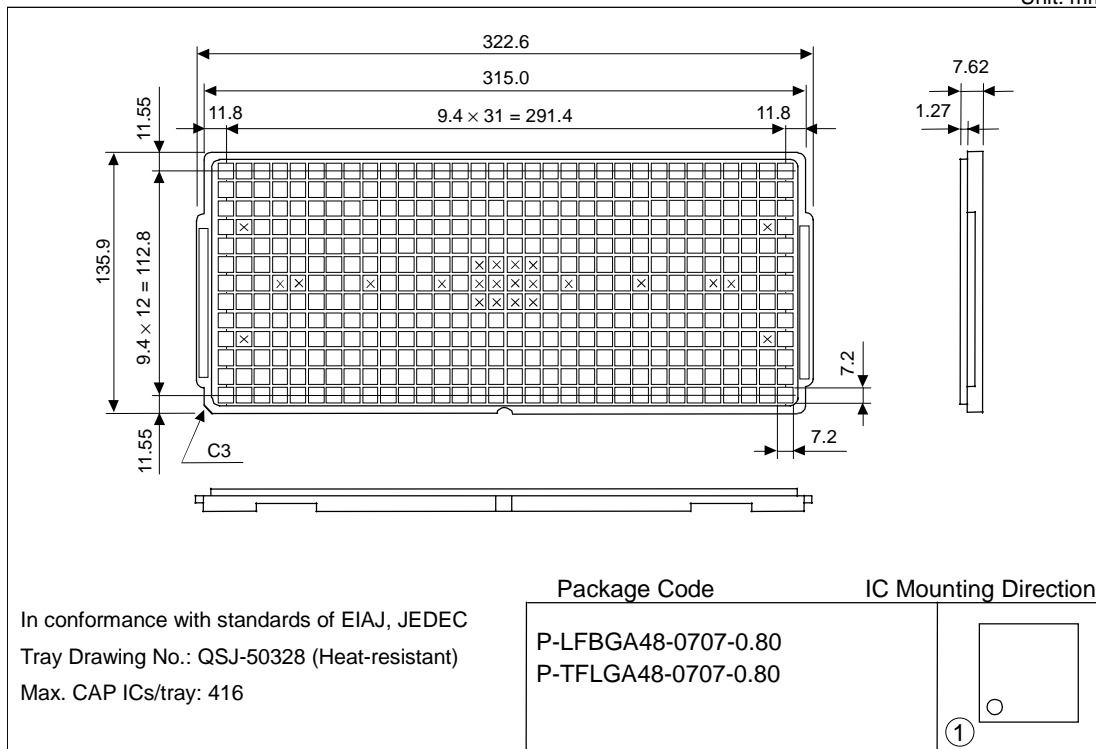
PACKAGE INFORMATION
7. PACKING

Unit: mm



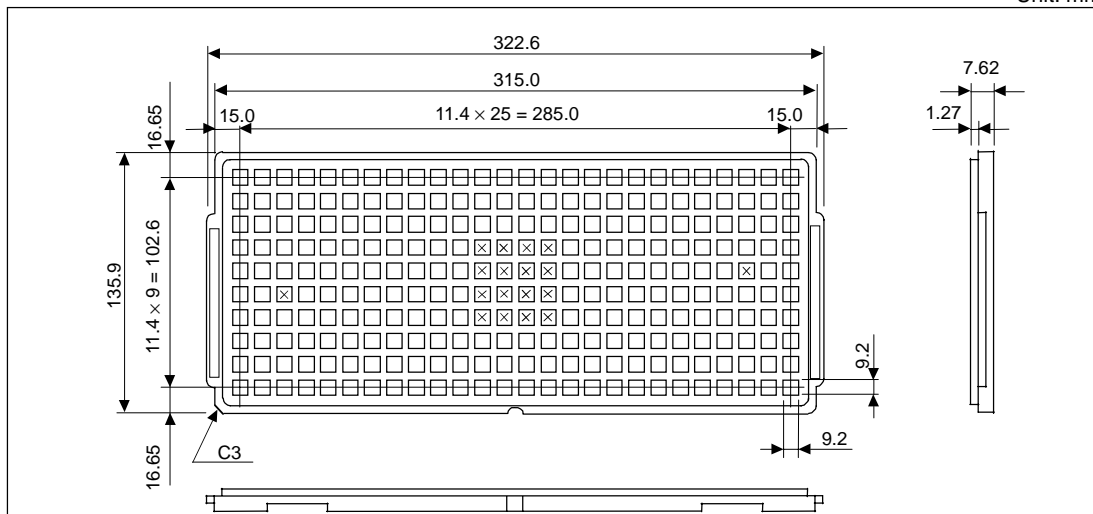
PACKAGE INFORMATION
7. PACKING

Unit: mm



PACKAGE INFORMATION
7. PACKING

Unit: mm

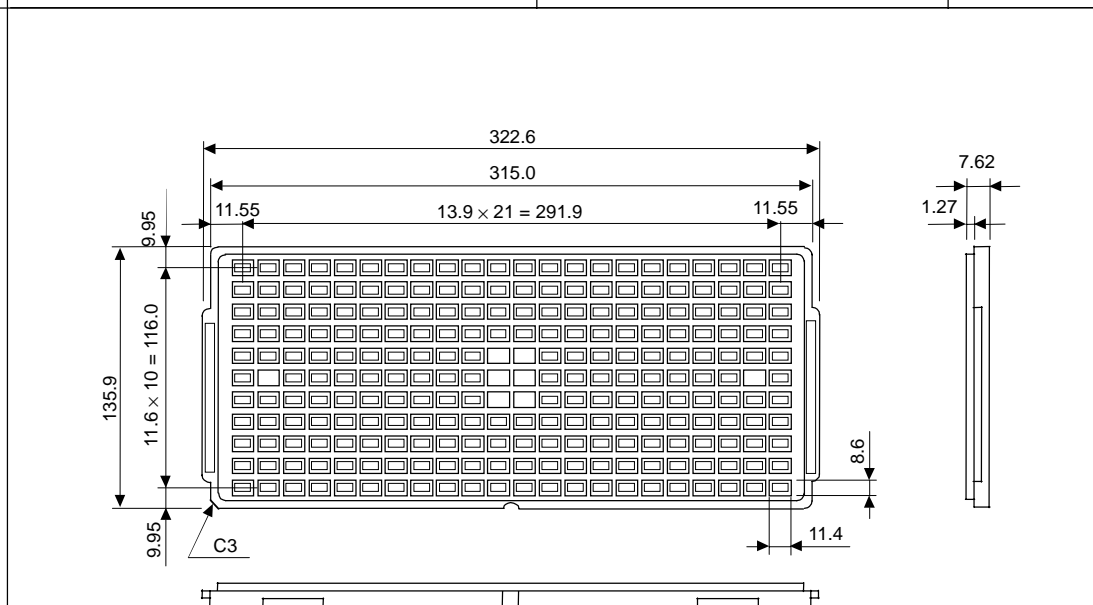
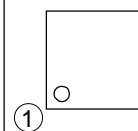


In conformance with standards of EIAJ, JEDEC
Tray Drawing No.: QSJ-50363 (Heat-resistant)
Max. CAP ICs/tray: 260

Package Code

P-LFBGA84-0909-0.80
P-TFLGA84-0909-0.80

IC Mounting Direction

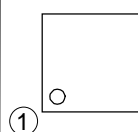


In conformance with standards of EIAJ, JEDEC
Tray Drawing No.: QSJ-50345 (Heat-resistant)
Max. CAP ICs/tray: 242

Package Code

P-LFLGA49-8.4x11.2-0.80

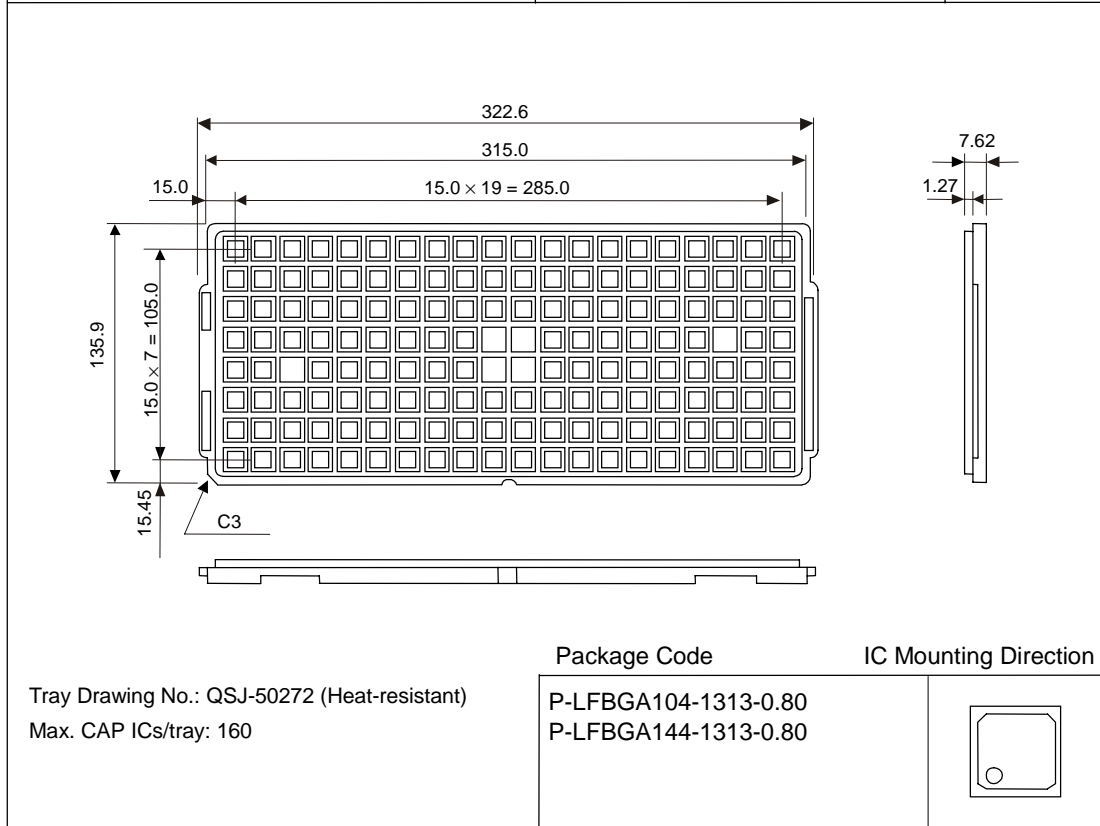
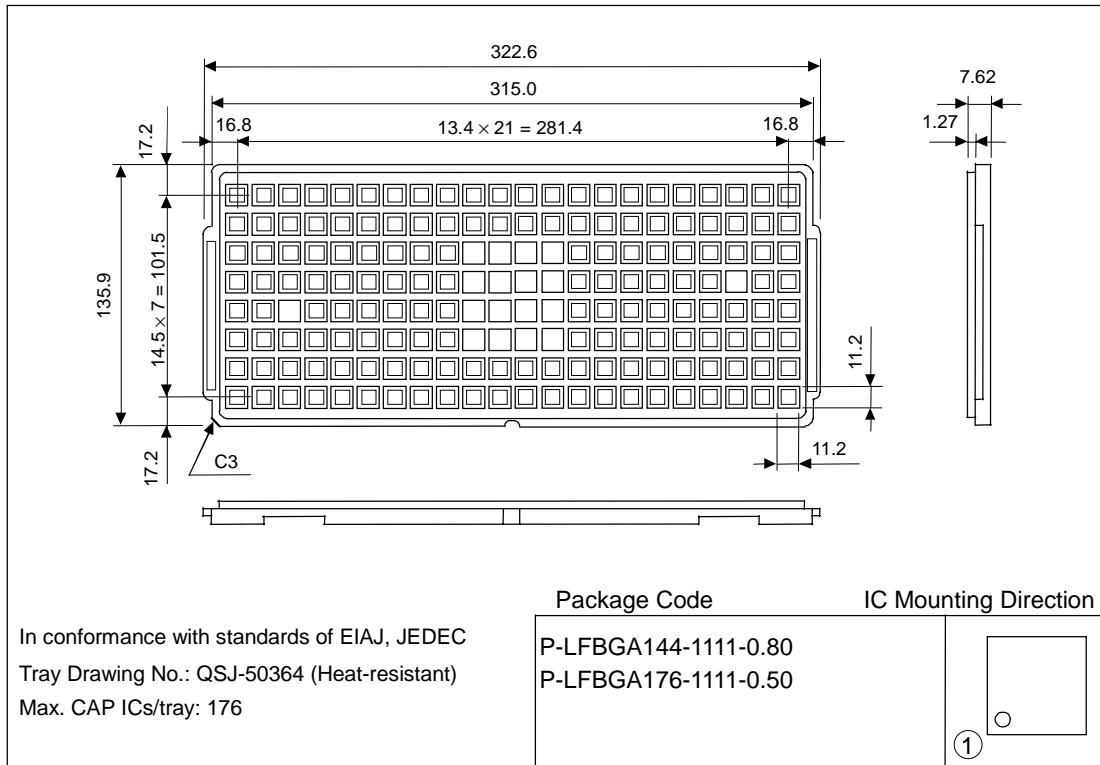
IC Mounting Direction



PACKAGE INFORMATION

7. PACKING

Unit: mm



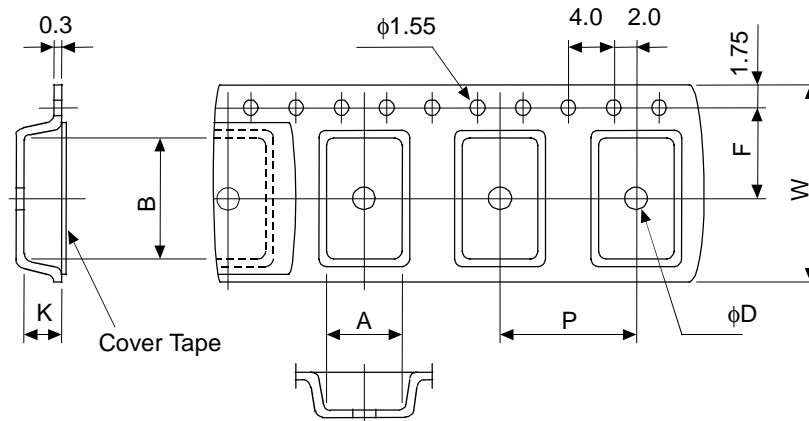
PACKAGE INFORMATION

7. PACKING

7.2.3 Tape-and-Reel

(1) Embossed Carrier Tape (12, 16, 24 mm width)

Unit: mm



Tape Material: PS (coated with carbon)

Package Code	Tape Dimension (Unit: mm)							Number of Packages to be Stored (pcs/reel)
	W	P	A	B	K	F	D	
SOP8-P-250-1.27-K	16.0	12.0	7.2	5.5	2.3	7.5	1.5	2,000
SOP8-P-250-1.27-K	16.0	8.0	5.4	7.2	2.1	7.5	1.5	2,000
SOP16-P-300-1.27-K	24.0	12.0	9.1	11.5	2.1	11.5	1.5	1,000
SOP28-P-430-1.27-K	24.0	16.0	12.8	19.3	2.7	11.5	2.0	1,000
SOP24-P-430-1.27-K SSOP32-P-430-1.00-K	24.0	16.0	13.0	17.0	2.7	11.5	1.5	1,000
SSOP20-P-250-0.95-K	16.0	12.0	8.1	10.4	2.3	7.5	1.5	2,000
SSOP30-P-56-0.65-K	16.0	12.0	8.1	10.1	1.9	7.5	1.5	1,000
QFP44-P-910-0.80-2K QFP56-P-910-0.65-2K	24.0	16.0	14.5	15.5	2.6	11.5	2.0	1,000
QFP64-P-1414-0.80-BK QFP80-P-1414-0.65-K	24.0	24.0	17.7	17.7	2.8	11.5	2.0	500
TSOP(1)32-P-814-0.50-1K TSOP(1)32-P-814-0.50-1L	24.0	12.0	8.6	14.4	1.7	11.5	2.0	1,000
TSOP(2)26/20-P-300-1.27-K TSOP(2)26/20-P-300-1.27-L TSOP(2)26/24-P-300-1.27-K TSOP(2)26/24-P-300-1.27-3K TSOP(2)26/24-P-300-1.27-L	24.0	12.0	9.6	17.8	1.4	11.5	2.0	1,000
SOJ26/20-P-300-1.27 SOJ26/24-P-300-1.27 SOJ26/24-P-300-1.27-3 SOJ26-P-300-1.27	24.0	12.0	8.8	17.8	3.7	11.5	2.0	1,000
SOJ26/20-P-350-1.27	24.0	12.0	10.4	17.8	3.9	11.5	2.0	1,000
SOJ28/24-P-400-1.27 SOJ28-P-400-1.27	24.0	16.0	11.6	19.0	4.2	11.5	2.0	1,000

R1/R2
R3/R4

(1) Embossed Carrier Tape (12, 16, 24 mm width) (Continued)

Unit: mm

Package Code	Tape Dimension (Unit: mm)							Number of Packages to be Stored (pcs/reel)
	W	P	A	B	K	F	D	
QFJ18-P-R290-1.27 QFJ22-P-R290-1.27	24.0	12.0	8.5	13.8	3.6	11.5	1.5	1,000
QFJ28-P-S450-1.27	24.0	16.0	13.0	13.0	4.9	11.5	1.5	800
TQFP48-P-0707-0.50-K	16.0	12.0	9.5	9.5	2.0	7.5	1.5	1,000
TQFP44-P-1010-0.80-K TQFP64-P-1010-0.50-K	24.0	16.0	12.5	12.5	1.5	11.5	2.0	1,000
P-TFLGA48-0707-0.80 P-LFBGA48-0707-0.80	16.0	12.0	7.3	7.3	2.1	7.5	1.5	1,000
P-TFLGA56-0808-0.80	16.0	12.0	8.3	8.3	1.7	7.5	1.5	1,000
P-TFLGA84-0909-0.80 P-LFBGA84-0909-0.80	16.0	12.0	9.3	9.3	2.2	7.5	1.5	1,000
P-LFLGA49-8.4x11.2-0.80	24.0	12.0	8.6	11.4	2.0	11.5	2.0	1,000
P-LFBGA144-1111-0.80 P-LFBGA176-1111-0.50	24.0	16.0	11.3	11.3	2.5	11.5	2.0	1,000
P-LFBGA104-1313-0.80 P-LFBGA144-1313-0.80	24.0	16.0	13.3	13.3	1.6	11.5	2.0	1,000
P-LFBGA224-1515-0.80	24.0	24.0	15.2	15.2	1.8	11.5	2.0	1,000

(2) Embossed Carrier Tape (32, 44 mm width) (Continued)

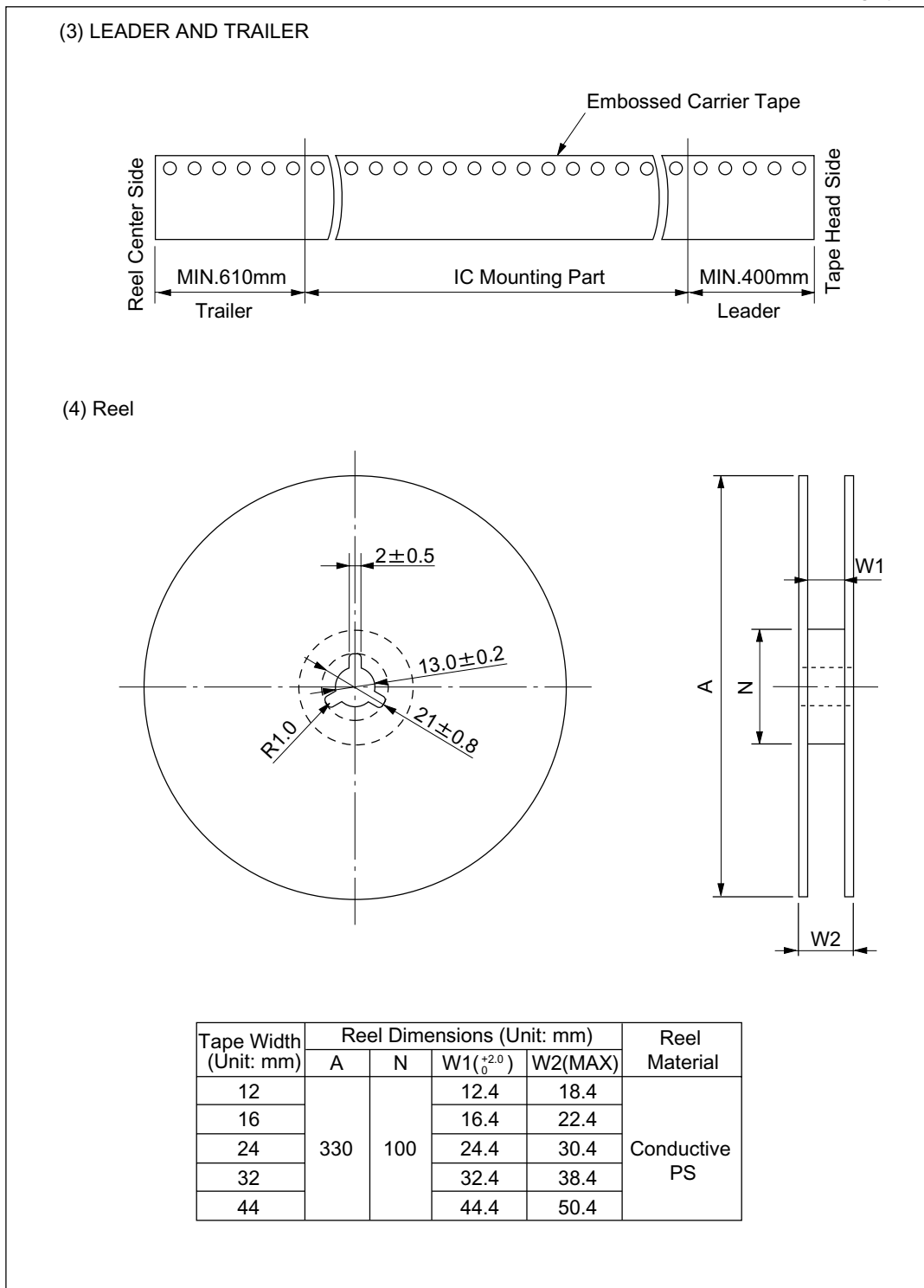
Tape Material: PS (coated with carbon)

Package Code	Tape Dimension (Unit: mm)								Number of Packages to be Stored (pcs/reel)
	W	P	A	B	K	F	S	D	
TSOP(2)32-P-400-1.27-K TSOP(2)50/44-P-400-0.80-K TSOP(2)50/44-P-400-0.80-1K TSOP(2)50-P-400-0.80-K TSOP(2)50-P-400-0.80-1K	32.0	16.0	12.3	21.4	1.7	14.2	28.4	2.0	1,000
TSOP(2)54-P-400-0.80-K TSOP(2)66-P-400-0.65-K TSOP(2)86-P-400-0.50-K	44.0	16.0	12.2	22.8	2.0	20.2	40.4	2.0	1,000
TSOP(2)70/64-P-400-0.65-K TSOP(2)70-P-400-0.65-K	44.0	16.0	12.2	24.1	2.0	20.2	40.4	2.2	1,000
TSOP(2)48-P-550-0.80-K	32.0	24.0	16.0	20.2	1.9	14.2	28.4	2.1	1,000
SOJ40-P-400-1.27	44.0	16.0	11.5	26.7	4.1	20.2	40.4	2.0	800
SOJ42-P-400-1.27	44.0	16.0	11.7	27.8	4.1	20.2	40.4	2.0	800
QFJ44-P-S650-1.27	32.0	24.0	17.9	17.9	5.0	14.2	28.4	2.0	500
QFJ68-P-S950-1.27	44.0	32.0	25.5	25.5	5.0	20.2	40.4	2.0	300
QFJ84-P-S115-1.27	44.0	36.0	30.5	30.5	5.0	20.2	40.4	2.0	200

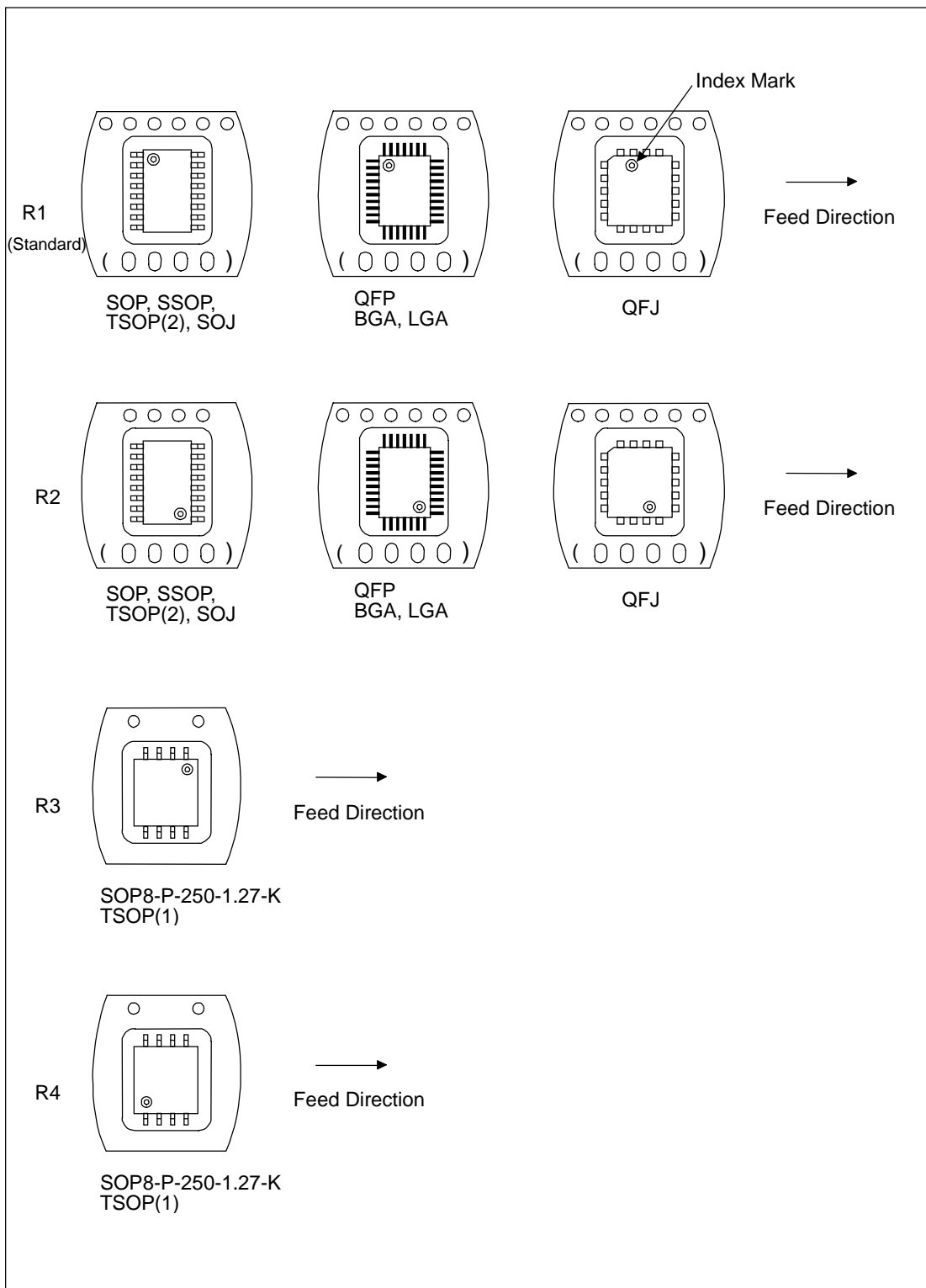
PACKAGE INFORMATION

7. PACKING

Unit: mm



(5) IC Mounting Direction



PACKAGE INFORMATION

7. PACKING

7.3 Average Quantity of Packages to be Housed

(1) Tubes

Package		Tube	Inner Box	Outer Box
Package Type	Package code	Packages/Tube	Packages/Inner Box (Ordinary Packing)	Packages/Outer Box (Ordinary Packing)
DIP (300mil)	DIP8-P-300-2.54	50	2,000/a	16,000/A
	DIP14-P-300-2.54	25	1,000/a	8,000/A
	DIP16-P-300-2.54	25	1,000/a	8,000/A
	DIP18-P-300-2.54	20	800/a	6,400/A
	DIP20-P-300-2.54-W1	19	760/a	6,080/A
	DIP20-P-300-2.54-S1	17	680/a	5,440/A
	DIP22-P-300-2.54-S1	17	680/a	5,440/A
	DIP8-G-300-2.54	50	2,000/a	16,000/A
	DIP14-G-300-2.54	24	960/a	7,680/A
	DIP16-G-300-2.54	24	960/a	7,680/A
	DIP18-G-300-2.54	20	800/a	6,400/A
	DIP14-C-300-2.54	24	960/a	7,680/A
	DIP16-C-300-2.54	24	960/a	7,680/A
	DIP18-C-300-2.54	20	800/a	6,400/A
	DIP20-C-300-2.54	18	720/a	5,760/A
DIP (400mil)	DIP22-P-400-2.54	17	1,190/b	4,760/B
	SDIP30-P-400-1.778	17	1,190/b	4,760/B
	DIP22-G-400-2.54	17	1,190/b	4,760/B
	DIP22-C-400-2.54	17	595/a	4,760/A
DIP (600mil)	DIP24-P-600-2.54	15	750/b	3,000/B
	DIP28-P-600-2.54	13	650/b	2,600/B
	DIP32-P-600-2.54	11	550/b	2,200/B
	DIP36-P-600-2.54	10	500/b	2,000/B
	DIP40-P-600-2.54	9	450/b	1,800/B
	DIP42-P-600-2.54	9	450/b	1,800/B
	DIP48-P-600-2.54	8	400/b	1,600/B
	SDIP42-P-600-1.778	12	600/b	2,400/B
	DIP24-G-600-2.54	15	750/b	3,000/B
	DIP28-G-600-2.54	13	650/b	2,600/B
	WDIP28-G-600-2.54	13	650/b	2,600/B
	WDIP32-G-600-2.54	11	550/b	2,200/B
	DIP40-G-600-2.54	9	450/b	1,800/B
	WDIP40-G-600-2.54	9	450/b	1,800/B
	DIP42-G-600-2.54	8	400/b	1,600/B
	DIP24-C-600-2.54	15	375/a	3,000/A
	DIP28-C-600-2.54	13	325/a	2,600/A
	DIP40-C-600-2.54	9	225/a	1,800/A
DIP42-C-600-2.54	9	225/a	1,800/A	
DIP48-C-600-2.54	7	175/a	1,400/A	
DIP(750mil)	SDIP64-P-750-1.778	8	256/b	1,024/A

(1) Tubes (Continued)

PACKAGE INFORMATION

7. PACKING

Package Type	Package	Tube	Inner Box		Outer Box	
	Package code	Packages/Tube	Packages/Inner Box		Packages/Outer Box	
			Ordinary Packing	Moisture-proof Packing	Ordinary Packing	Moisture-proof Packing
ZIP	ZIP20-P-400-1.27,-W1	18	1,260/a	—	10,080/A	—
	ZIP24-P-400-1.27	15	1,050/a	—	8,400/A	—
	ZIP28-P-400-1.27	13	910/a	—	7,280/A	—
	ZIP40-P-475-1.27	9	540/a	—	4,320/A	—
SOP	SOP8-P-250-1.27-K	100	14,300/c	—	114,400/C	—
	SOP16-P-300-1.27-K	45	6,075/a	3,150/a	48,600/A	25,200/A
	SOP24-P-430-1.27-K	30	3,000/b	900/a	12,000/B	7,200/A
	SOP28-P-430-1.27-K	25	2,500/b	750/a	10,000/B	6,000/A
	SOP32-P-525-1.27-K	23	2,300/b	690/a	9,200/B	5,520/A
	SOP40-P-525-1.27-K	18	1,800/b	540/a	7,200/B	4,320/A
	SOP44-P-600-1.27-K	17	1,700/b	510/a	6,800/B	4,080/A
	SSOP20-P-250-0.95-K	50	7,150/c	2,500/c	57,200/C	20,000/C
	SSOP32-P-430-1.00-K	30	3,000/b	900/a	12,000/B	7,200/A
	SSOP64-P-525-0.80-K	18	1,800/b	540/a	7,200/B	4,320/A
SSOP70-P-500-0.80-K	16	1,600/b	480/a	6,400/B	3,840/A	
SOJ	SOJ26/20-P-300-1.27	27	2,160/a	1,890/a	17,280/A	15,120/A
	SOJ26/24-P-300-1.27	27	2,160/a	1,890/a	17,280/A	15,120/A
	SOJ26-P-300-1.27	27	2,160/a	1,890/a	17,280/A	15,120/A
	SOJ28-P-300-1.27	26	2,080/a	1,820/a	16,640/A	14,560/A
	SOJ26/20-P-350-1.27	27	1,701/a	1,512/a	13,608/A	12,096/A
	SOJ28/24-P-400-1.27	25	1,800/a	1,225/a	14,400/A	9,800/A
	SOJ28-P-400-1.27	25	1,800/a	1,225/a	14,400/A	9,800/A
	SOJ32-P-400-1.27,-1	22	1,584/a	1,078/a	12,672/A	8,624/A
	SOJ36-P-400-1.27	19	1,368/a	931/a	10,944/A	7,448/A
	SOJ40-P-400-1.27	18	1,296/a	882/a	10,368/A	7,056/A
	SOJ42-P-400-1.27	17	1,224/a	833/a	9,792/A	6,664/A
	SOJ50-P-400-0.80	22	1,584/a	1,078/a	12,672/A	8,624/A
QFJ	QFJ18-P-R290-1.27	35	2,800/a	2,450/a	22,400/A	19,600/A
	QFJ22-P-R290-1.27	35	2,800/a	2,450/a	22,400/A	19,600/A
	QFJ20-P-S350-1.27	48	2,688/a	1,536/a	21,504/A	12,288/A
	QFJ28-P-S450-1.27	38	1,330/a	950/a	10,640/A	7,600/A
	QFJ32-P-R450-1.27	32	1,120/a	960/a	8,960/A	7,680/A
	QFJ44-P-S650-1.27	26	1,820/b	650/a	7,280/B	5,200/A
	QFJ68-P-S950-1.27	18	882/b	270/a	3,528/B	2,160/A
QFJ84-P-S115-1.27	15	630/b	225/a	2,520/B	1,800/A	

Notes: 1. Inner and Outer Box Dimensions (length × width × height)

Inner Box a: 530 × 125 × 65 mm

Inner Box b: 530 × 220 × 65 mm

Inner Box c: 540 × 125 × 65 mm

Outer Box A: 540 × 275 × 280 mm

Outer Box B: 540 × 245 × 280 mm

Outer Box C: 560 × 310 × 320 mm

2. The type of outer box used is subject to change according to the quantity of ICs to be shipped.

PACKAGE INFORMATION

7. PACKING

(2) Trays

	Packages	Tray	Inner Box	Outer Box
Package Type	Package code	Packages /Tray	Packages /Inner Box	Packages /Outer Box
SOP	SOP44-P-600-1.27-K	40	600/f	2,400/F
	SSOP30-P-56-0.65-K	200	3,000/f	12,000/F
	SSOP32-P-640-0.80-K	50	750/d	6,000/D
	SSOP60-P-700-0.65-BK	28	420/d	3,360/D
QFP	QFP44-P-910-2K	50	750/d	6,000/D
	QFP56-P-910-2K	50	750/d	6,000/D
	QFP64-P-1414-0.80-BK	50	750/d	6,000/D
	QFP80-P-1414-0.65-K	50	750/d	6,000/D
	QFP64-P-1420-1.00-BK	28	420/d	3,360/D
		66	990/f	3,960/F
	QFP80-P-1420-0.80-BK	28	420/d	3,360/D
		66	990/f	3,960/F
	QFP100-P-1420-0.80-BK,-BK4	28	420/d	3,360/D
		66	990/f	3,960/F
	QFP128-P-1420-0.50-K	28	420/d	3,360/D
	QFP128-P-2828-0.80-K,-BK,-DK	24	360/f	1,440/F
	QFP160-P-2828-0.65-BK,-BK4	24	360/f	1,440/F
	QFP208-P-2828-0.50-BK4,-CK4	24	360/f	1,440/F
	QFP240-P-3232-0.50-BK4	24	360/f	1,440/F
	QFP272-P-3636-0.50-BK4	21	315/f	1,260/F
QFP304-P-4040-0.50-BK4	12	180/f	720/F	
BGA	P-BGA256-2727-1.27	40	400/f	1,600/F
	P-BGA352-3535-1.27	24	240/f	960/F
	P-BGA420-3535-1.27			
	P-BGA560-3535-1.00			
	M-BGA560-3535-1.00			
FBGA	P-LFBGA48-0707-0.80	416	4,160/e	16,640/E
	P-LFBGA84-0909-0.80	260	2,600/e	10,400/E
	P-LFBGA144-1111-0.80	176	1,760/e	7,040/E
	P-LFBGA176-1111-0.50	176	1,760/e	7,040/E
	P-LFBGA104-1313-0.80	160	1,600/e	6,400/E
	P-LFBGA144-1313-0.80	160	1,600/e	6,400/E
	P-LFBGA224-1515-0.80	119	1,190/e	4,760/E
LGA	P-TFLGA48-0707-0.80	416	4,160/e	16,640/E
	P-TFLGA56-0808-0.80	286	2,860/e	11,440/E
	P-TFLGA84-0909-0.80	260	2,600/e	10,400/E
	P-LFLGA49-8.4x11.2-0.80	242	2,420/e	9,680/E

(2) Trays

Package Type	Packages Package code	Tray Packages /Tray	Inner Box Packages /Inner Box	Outer Box Packages /Outer Box
TSOP	TSOP(1)32-P-814-0.50-1K, -1L	80	1,200/f	4,800/F
	TSOP(1)32-P-820-0.50-K	80	1,200/f	4,800/F
	TSOP(1)48-P-1220-0.50-1K	96	1,440/f	5,760/F
	TSOP(2)26/20-P-300-1.27-K, -L	80	1,200/f	4,800/F
	TSOP(2)26/24-P-300-1.27-K,-3K,-L	80	1,200/f	4,800/F
	TSOP(2)28/24-P-400-1.27-K, -L	80	1,200/f	4,800/F
	TSOP(2)28-P-400-1.27-K,-1K	80	1,200/f	4,800/F
	TSOP(2)32-P-400-1.27-K	80	1,200/f	4,800/F
	TSOP(2)44/40-P-400-0.80-K	80	1,200/f	4,800/F
	TSOP(2)44-P-400-0.80-K,-1K	80	1,200/f	4,800/F
	TSOP(2)44-P-400-0.50-K	80	1,200/f	4,800/F
	TSOP(2)50/44-P-400-0.80-K,-1K	80	1,200/f	4,800/F
	TSOP(2)50-P-400-0.80-K,-1K	80	1,200/f	4,800/F
	TSOP(2)54-P-400-0.80-K	80	1,200/f	4,800/F
	TSOP(2)66-P-400-0.65-K	80	1,200/f	4,800/F
	TSOP(2)70/64-P-400-0.65-K	80	1,200/f	4,800/F
	TSOP(2)70-P-400-0.65-K	80	1,200/f	4,800/F
	TSOP(2)70-P-400-0.50-K	80	1,200/f	4,800/F
	TSOP(2)86-P-400-0.50-K	80	1,200/f	4,800/F
	TSOP(2)48-P-550-0.80-K	50	750/f	3,000/F
SHP	SHP32-P-1125-0.65-K	80	1,200/f	4,800/F
TQFP	TQFP48-P-0707-0.50-K	250	3,750/f	15,000/F
	TQFP44-P-1010-0.80-K	50	750/d	6,000/D
	TQFP64-P-1010-0.50-K	50	750/d	6,000/D
	TQFP80-P-1212-0.50-K	50	750/d	6,000/D
	TQFP100-P-1414-0.50-K	50	750/d	6,000/D
	TQFP120-P-1414-0.40-K	50	750/d	6,000/D
TQFP128-P-1414-0.40-K	50	750/d	6,000/D	
LQFP	LQFP144-P-2020-0.50-K	60	900/d	3,600/F
	LQFP176-P-2424-0.50-BK	40	600/d	2,400/F
	LQFP208-P-2828-0.50-K	36	540/d	2,160/F
QFJ	QFJ28-P-S450-1.27	50	750/d	3,000/F
	QFJ44-P-S650-1.27	50	750/d	3,000/F
	QFJ68-P-S950-1.27	36	540/d	2,160/F
	QFJ84-P-S115-1.27	24	360/d	1,440/F

Notes: 1. Inner and Outer Box Dimensions (length × width × height)

Inner Box d: 300 × 170 × 160 mm

Outer Box D: 730 × 320 × 350 mm

Inner Box e: 390 × 190 × 130 mm

Outer Box E: 400 × 400 × 300 mm

Inner Box f: 380 × 190 × 150 mm

Outer Box F: 410 × 400 × 330 mm

2. The type of outer box used is subject to change according to the quantity of ICs to be shipped.

PACKAGE INFORMATION

7. PACKING

(3) Tape-and-Reel

Package		Reel	Inner Box		Outer Box	
Package Type	Package code	Devices /reel	Packages /Inner Box		Packages Outer Box	
			Ordinary Packing	Moisture-proof Packing	Ordinary Packing	Moisture-proof Packing
SOP	SOP8-P-250-1.27-K	2,000	2,000/g	2,000/g	20,000/G	20,000/G
	SOP16-P-300-1.27-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOP24-P-430-1.27-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOP28-P-430-1.27-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOP32-P-525-1.27-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	SOP40-P-525-1.27-K	800	800/g	800/h	8,000/G	6,400/G
	SOP44-P-600-1.27-K	600	600/g	600/h	6,000/G	4,800/G
	SSOP20-P-250-0.95-K	2,000	2,000/g	2,000/g	20,000/G	20,000/G
	SSOP30-P-56-0.65-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SSOP32-P-430-1.00-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SSOP60-P-700-0.65-BK	600	600/g	600/h	6,000/G	4,800/G
	SSOP64-P-525-0.80-K	800	800/g	800/h	8,000/G	6,400/G
SSOP70-P-500-0.80-K	600	600/g	600/h	6,000/G	4,800/G	
QFP	QFP44-P-910-0.80-2K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	QFP56-P-910-0.65-2K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	QFP64-P-1414-0.80-BK	500	500/g	500/g	5,000/G	5,000/G
	QFP80-P-1414-0.65-K	500	500/g	500/g	5,000/G	5,000/G
	QFP64-P-1420-1.00-BK	600	600/g	600/h	6,000/G	4,800/G
	QFP80-P-1420-0.80-BK	600	600/g	600/h	6,000/G	4,800/G
	QFP100-P-1420-0.65-BK	600	600/g	600/h	6,000/G	4,800/G
QFP100-P-1420-0.65-BK4	600	600/g	600/h	6,000/G	4,800/G	
TQFP	TQFP48-P-0707-0.50-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TQFP44-P-1010-0.80-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TQFP64-P-1010-0.50-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
SOJ	SOJ26/20-P-300-1.27	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOJ26/24-P-300-1.27	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOJ26/24-P-300-1.27-3	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOJ26-P-300-1.27	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOJ26/20-P-350-1.27	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOJ28/24-P-400-1.27	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOJ28-P-400-1.27	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	SOJ40-P-400-1.27	800	800/g	800/h	8,000/G	6,400/G
SOJ42-P-400-1.27	800	800/g	800/h	8,000/G	6,400/G	
QFJ	QFJ18-P-R290-1.27	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	QFJ22-P-R290-1.27	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	QFJ28-P-S450-1.27	800	800/g	800/h	8,000/G	8,000/G
	QFJ44-P-S650-1.27	500	500/g	500/h	5,000/G	4,000/G
	QFJ68-P-S950-1.27	300	300/g	300/h	3,000/G	2,400/G
	QFJ84-P-S115-1.27	200	200/g	200/h	2,000/G	1,600/G

PACKAGE INFORMATION
7. PACKING

(3) Tape-and-Reel (Continued)

Package Type	Package code	Reel Devices /reel	Inner Box		Outer Box	
			Packages /Inner Box		Packages Outer Box	
			Ordinary Packing	Moisture-proof Packing	Ordinary Packing	Moisture-proof Packing
TSOP	TSOP(1)32-P-814-0.50-1K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TSOP(1)32-P-814-0.50-1L	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TSOP(2)26/20-P-300-1.27-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TSOP(2)26/20-P-300-1.27-L	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TSOP(2)26/24-P-300-1.27-K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TSOP(2)26/24-P-300-1.27-3K	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TSOP(2)26/24-P-300-1.27-L	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	TSOP(2)28/24-P-400-1.27-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)28/24-P-400-1.27-L	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)28-P-400-1.27-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)28-P-400-1.27-1K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)44/40-P-400-0.80-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)44-P-400-0.80-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)44-P-400-0.80-1K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)70-P-400-0.50-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)32-P-400-1.27-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)50/44-P-400-0.80-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)50/44-P-400-0.80-1K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)50-P-400-0.80-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)50-P-400-0.80-1K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)54-P-400-0.80-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)66-P-400-0.65-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)86-P-400-0.50-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
	TSOP(2)70/64-P-400-0.65-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G
TSOP(2)70-P-400-0.65-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G	
TSOP(2)48-P-550-0.80-K	1,000	1,000/g	1,000/h	10,000/G	8,000/G	
LGA	P-TFLGA48-0707-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	P-TFLGA56-0808-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	P-TFLGA84-0909-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	P-LFLGA49-8.4x11.2-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
FBGA	P-LFBGA48-0707-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	P-LFBGA84-0909-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	P-LFBGA144-1111-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	P-LFBGA176-1111-0.50	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	P-LFBGA104-1313-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
	P-LFBGA144-1313-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G
P-LFBGA224-1515-0.80	1,000	1,000/g	1,000/g	10,000/G	10,000/G	

Notes: 1. Inner and Outer Box Dimensions (length × width × height)

Inner Box g: 360 × 360 × 50 mm

Inner Box h: 360 × 360 × 65 mm

Outer Box G: 550 × 370 × 380 mm

2. The type of outer box used is subject to change according to the quantity of ICs to be shipped.

PACKAGE INFORMATION

7. PACKING

7.4 Weight of Pack Devices

(1) Tubes

Package		Inner Box Weight (Kg)		Outer Box Weight (Kg)	
Package Type	Pin Count	Ordinary Packing	Moisture-Proof Packing	Ordinary Packing	Moisture-Proof Packing
300mil Plastic DIP	8, 14, 16	1.9	—	16	—
	18, 20, 22	2.0	—	17	—
400mil Plastic DIP	22, 30	2.1	—	18	—
600mil Plastic DIP	24, 28, 36, 40, 42, 48	4.6	—	19	—
	32	4.2	—	17	—
750mil Plastic DIP	64	4.7	—	19	—
ZIP	20	3.3	—	27	—
	24, 28, 40	3.1	—	26	—
SOP	8	3.8	—	31	—
	16	3.2	—	26	—
	24	4.0	1.4	17	12
	28, 40	5.3	1.8	22	15
	32	5.8	1.9	24	16
	44	7.0	2.3	29	19
SSOP	20	3.6	1.4	30	12
	32	4.0	1.4	17	12
	64	5.1	1.7	21	14
	70	7.0	2.3	29	19
SOJ	300mil 26/20, 26/24, 26, 28	3.1	2.8	26	23
	400mil 28/24, 28, 32, 36, 40, 42, 50	3.6	2.6	30	21
QFJ	18, 22	2.7	2.5	22	21
	20	3.0	1.9	25	16
	28	2.7	2.0	22	17
	32	2.3	2.1	19	17
	44, 68, 84	6.2	2.4	26	20

Note: The weight of pack devices refer to a weight when the number of pack devices is typical.

PACKAGE INFORMATION
7. PACKING

(2) Trays

Package Type	Packages		Inner Box Weight (Kg)	Outer Box Weight (Kg)
	Pin Count	Standard Dimension		
SOP	44	600 mil	3.5	15
SSOP	30	560 mil	2.8	12
	32	640 mil	2.5	21
	60	700 mil	2.1	18
QFP	44, 56	910	1.9	16
	64, 80	1414	2.2	18
	64, 80, 100, 128	1420	2.2	18
			3.7	16
	128,160, 208	2828	4.2	17
	240	3232	5.0	21
	272	3636	5.3	22
304	4040	4.4	18	
TSOP(1)	32	814, 820	2.6	11
TSOP(2)	26/20, 26/24	300 mil	2.6	11
	28/24, 28, 32, 44/40, 44, 50/44, 50, 54	400 mil	2.9	12
	66, 70/64, 70, 86	400 mil	2.9	12
	48	550 mil	2.8	12
TQFP	48	0707	2.9	12
	44, 64	1010	1.7	15
	80	1212	1.8	15
	100, 120, 128	1414	1.9	16
	144	2020	3.4	14
	176	2424	3.3	14
QFJ	208	2828	3.5	15
	28	S450	3.0	13
	44	S650	3.7	16
	68	S950	4.7	20
	84	S115	4.5	19
BGA	256	2727	2.4	10
	352, 420, 560	3535	2.5	11
FBGA LGA	48	0707	2.3	10
	56	0808	2.3	10
	84	0909	2.3	10
	49	8.4x11.2	2.3	10
	144	1111	2.3	10
	104, 144	1313	2.3	10
	224	1515	2.3	10

PACKAGE INFORMATION

7. PACKING

(3) Tape-and-Reel

Package		Inner Box Weight (Kg)			Outer Box Weight (Kg)	
Package Type	Pin Count	Standard	Ordinary	Moisture-	Ordinary	Moisture-
		Dimension	Packing	proof Packing	Packing	proof Packing
SOP	8	250 mil	0.9	0.9	10	10
	16	300 mil	0.9	0.9	10	10
	24	430 mil	1.3	1.4	14	15
	28	430 mil	1.5	1.6	16	17
	32	525 mil	2.1	2.2	22	19
	40	525 mil	1.9	2.0	20	17
	44	600 mil	2.1	2.2	22	19
SSOP	20	250 mil	1.1	1.2	12	13
	30	560 mil	0.9	1.0	10	11
	32	430 mil	1.3	1.4	14	15
	60	700 mil	1.6	1.7	16	14
	64	525 mil	1.9	2.0	20	17
	70	500 mil	2.1	2.2	22	19
QFP	44, 56	910	1.2	1.3	13	14
	64, 80	1414	1.2	1.3	13	14
	64, 80, 100	1420	1.6	1.7	16	14
TQFP	48	0707	0.8	0.9	9	10
	44, 64	1010	1.0	1.1	11	12
TSOP(1)	32	814	1.0	1.1	11	12
TSOP(2)	26/20, 26/24	300 mil	1.1	1.2	12	13
	28/24, 28, 32, 44/40, 44, 70	400 mil	1.3	1.4	14	12
	50/44, 50, 54, 66, 70/64, 70, 86	400 mil	1.5	1.6	16	14
	48	550 mil	1.5	1.6	16	14
SOJ	26/20, 26/24, 26	300 mil	1.5	1.6	16	17
	26/20	350 mil	1.7	1.8	18	19
	28/24, 28	400 mil	2.0	2.1	21	22
	40, 42	400 mil	2.2	2.3	23	19
QFJ	18, 22	R290	1.2	1.3	13	14
	28	S450	1.5	1.6	16	17
	44	S650	1.8	1.9	19	16
	68	S950	2.2	2.3	23	19
	84	S115	2.1	2.2	22	19
FBGA LGA	48	0707	0.8	0.9	9	10
	56	0808	0.8	0.9	9	10
	84	0909	0.9	1.0	10	11
	49	8.4x11.2	0.9	1.0	10	11
	144, 176	1111	1.0	1.1	11	12
	103, 144	1313	1.1	1.2	12	13
	224	1515	1.2	1.3	13	14

7.5 Chip Packing

The packing method for IC chips is described.

