

μ PD789167, 789177, 789167Y, 789177Y Subseries Technical Notification		Document No.	ZBG-CC-09-0052	1/1
		Date issued	December 17, 2009	
		Issued by	Product Solution Group Multipurpose Microcomputer Systems Division Microcomputer Operations Unit NEC Electronics Corporation	
Related documents	μ PD789167, 789177, 789167Y, 789177Y Subseries User's Manual: U14186EJ6V0UD00 (6th edition)	Notification classification		Usage restriction
				Upgrade
			√	Document modification
				Other notification

1. Affected products

μ PD789166, μ PD789167, μ PD789176, μ PD789177, μ PD78F9177, μ PD78F9177A
 μ PD789166Y, μ PD789167Y, μ PD789176Y, μ PD789177Y, μ PD78F9177Y, μ PD78F9177AY

2. Notification

The incorrect descriptions below have been found in the user's manual for the μ PD789167, 789177, 789167Y, and 789177Y subseries.

Overview:

Dimensions of the items below shown in the 48-pin plastic TQFP package drawing in the user's manual are incorrect.

For details, see attachment 2.

- Terminal thickness
- Terminal coplanarity
- Terminal uniformity angle

The actual dimensions do not exceed the size shown in the package drawing.

Modification schedule:

These errors will be corrected in the next revision of the user's manual.

The document corrections are listed in attachment 1, and their details are described in attachment 2.

3. Document revision history

μ PD789167, 789177, 789167Y, 789177Y Subseries - Technical Notification

Document Number	Issued on	Description
ZBG-CC-09-0052	December 17, 2009	1st edition Correction to errors in a package drawing

Corrections to μ PD789167, 789177, 789167Y, 789177Y Subseries User's Manual

1. Corrected items

No.	Description	μ PD789167, 789177, 789167Y, 789177Y Subseries User's Manual	
		6th or Earlier	7th and Later
1	Correction to errors in a package drawing	×	○

Remark The meaning of each symbol is as follows:

×: Error

○: Corrected

2. Correction details

Item 1: See attachment 2 for details.

Item 1 – Correction to CHAPTER 31 PACKAGE DRAWINGS

Some dimensions described in *CHAPTER 31 PACKAGE DRAWINGS* are incorrect.

The actual dimensions do not exceed the size shown in the 48-pin plastic TQFP package drawing (S48GA-50-9EU-2).

Items in question

Item	Incorrect	Correct
Outline drawing code	S48GA-50-9EU-2	P48GA-50-9EU-1
Terminal thickness ^{*1}	0.145 – 0.045 to 0.145 + 0.055 (mm)	0.17 – 0.07 to 0.17 + 0.03 (mm)
Terminal coplanarity ^{*2}	0.10 (mm)	0.08 (mm)
Terminal uniformity angle ^{*3}	3 – 3 to 3 + 7 (°)	3 – 3 to 3 + 4 (°)

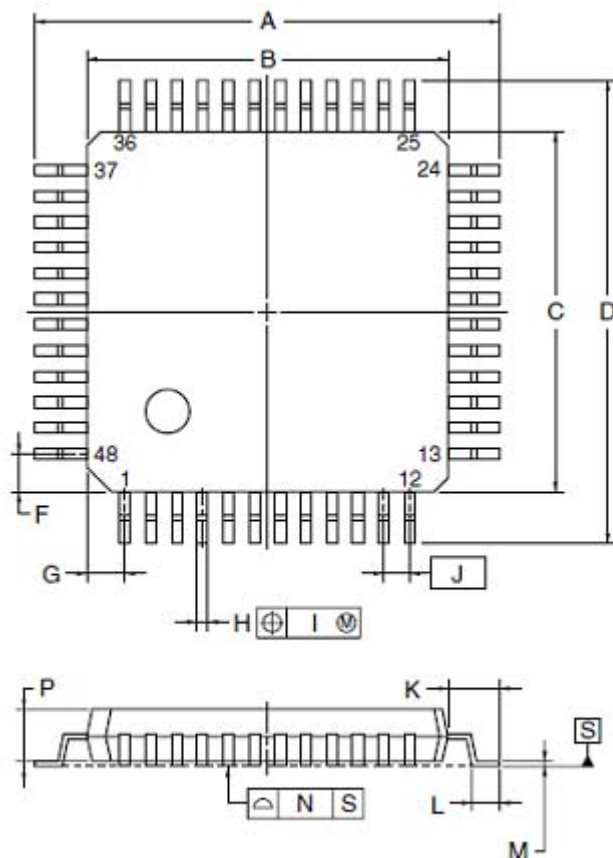
*1: Thickness of each terminal (including plating)

*2: Maximum deviation in vertical direction between each terminal bottom surface and seating plane.

*3: Angle between flat part of terminal and seating plane

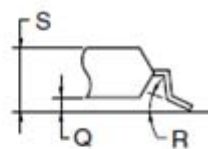
- 48-pin plastic TQFP (p. 440)

Incorrect:

**NOTE**

Each lead centerline is located within 0.10 mm of its true position (T.P.) at maximum material condition.

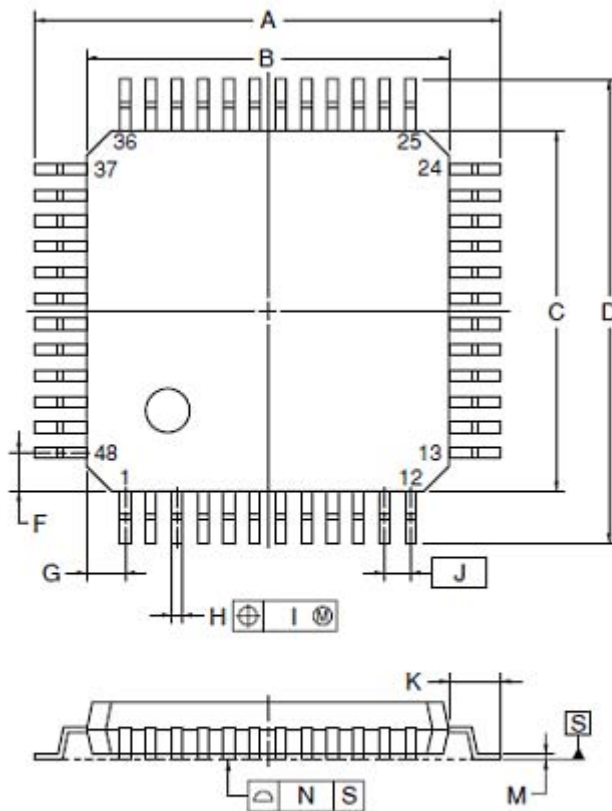
detail of lead end



ITEM	MILLIMETERS
A	9.0±0.2
B	7.0±0.2
C	7.0±0.2
D	9.0±0.2
F	0.75
G	0.75
H	0.22 ^{+0.05} _{-0.04}
I	0.10
J	0.5 (T.P.)
K	1.0±0.2
L	0.5±0.2
M	0.145 ^{+0.055} _{-0.045}
N	0.10
P	1.0±0.1
Q	0.1±0.05
R	3 ⁺⁷ ₋₃
S	1.27 MAX.

S48GA-50-9EU-2

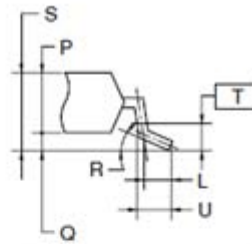
Correct:



NOTE

Each lead centerline is located within 0.10 mm of its true position (T.P.) at maximum material condition.

detail of lead end



ITEM	MILLIMETERS
A	9.0±0.2
B	7.0±0.2
C	7.0±0.2
D	9.0±0.2
F	0.75
G	0.75
H	0.22 ^{+0.05} _{-0.04}
I	0.10
J	0.5 (T.P.)
K	1.0±0.2
L	0.5
M	0.17 ^{+0.03} _{-0.07}
N	0.08
P	1.0±0.1
Q	0.1±0.05
R	3 ⁺⁴ ₋₃
S	1.27 MAX.
T	0.25 (T.P.)
U	0.6±0.15

P48GA-50-9EU-1

Modification schedule:

These errors will be corrected in the next revision of the user's manual.