



# SOT238-2

plastic led chip carrier; 52 leads

8 February 2016

Package information

## 1. Package summary

|                                       |                                 |
|---------------------------------------|---------------------------------|
| <b>Terminal position code</b>         | Q (quad)                        |
| <b>Package type descriptive code</b>  | PLCC52                          |
| <b>Package type industry code</b>     | PLCC52                          |
| <b>Package style descriptive code</b> | PLCC (plastic led chip carrier) |
| <b>Package style suffix code</b>      | NA (not applicable)             |
| <b>Package body material type</b>     | P (plastic)                     |
| <b>IEC package outline code</b>       | 112E11                          |
| <b>JEDEC package outline code</b>     | MS-018                          |
| <b>JEITA package outline code</b>     | EDR-7319                        |
| <b>Mounting method type</b>           | S (surface mount)               |
| <b>Issue date</b>                     | 15-11-2001                      |

Table 1. Package summary

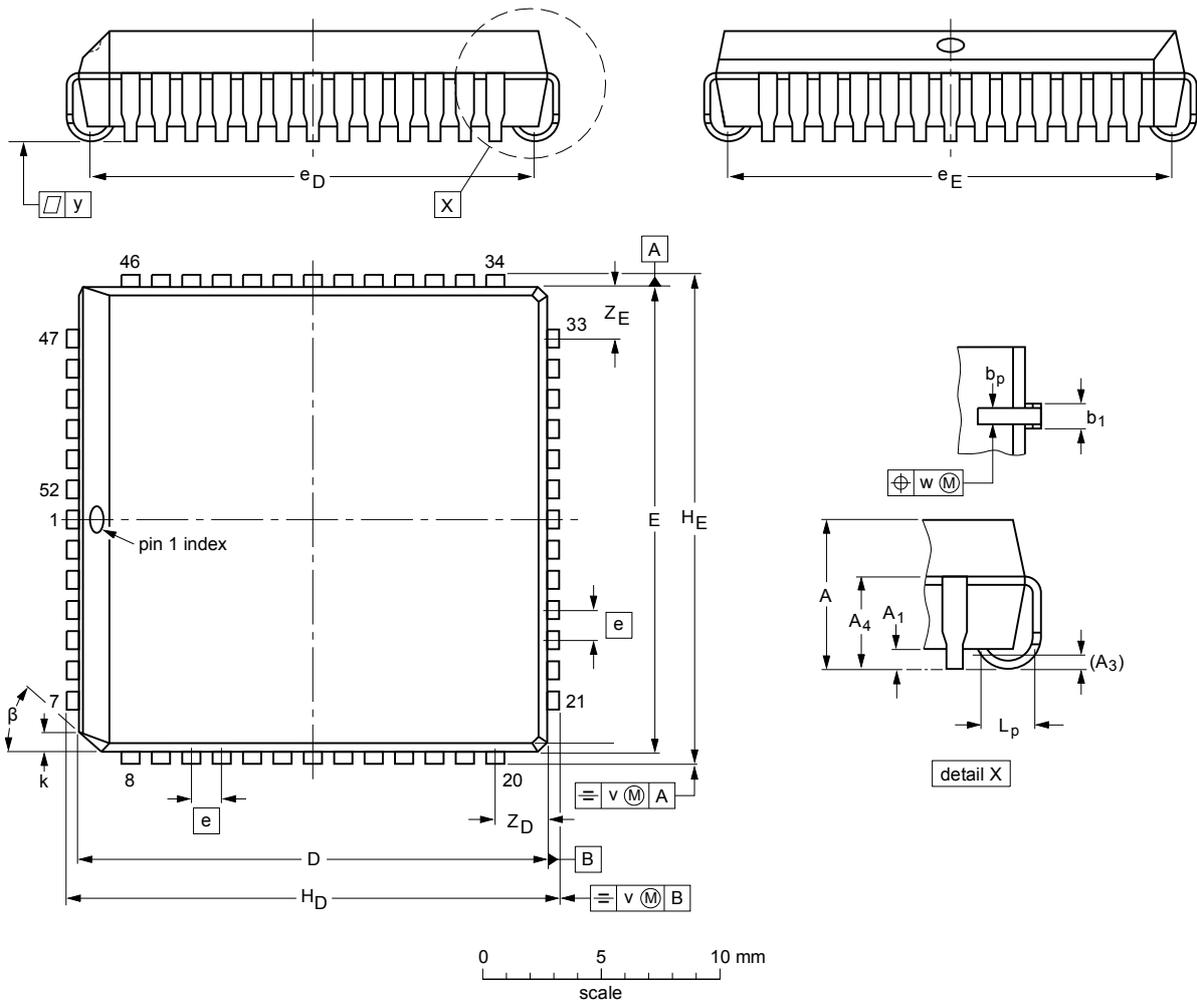
| Symbol         | Parameter                      | Min   | Typ | Nom   | Max   | Unit |
|----------------|--------------------------------|-------|-----|-------|-------|------|
| D              | package length                 | 19.05 | -   | 19.15 | 19.2  | mm   |
| E              | package width                  | 19.05 | -   | 19.15 | 19.2  | mm   |
| A              | seated height                  | 4.19  | -   | 4.57  | 4.57  | mm   |
| A <sub>2</sub> | package height                 | [tbd] | -   | 3.86  | [tbd] | mm   |
| n <sub>2</sub> | actual quantity of termination | -     | -   | 52    | -     |      |



## 2. Package outline

PLCC52: plastic led chip carrier; 52 leads

SOT238-2



DIMENSIONS (mm dimensions are derived from the original inch dimensions)

| UNIT   | A              | A <sub>1</sub><br>min. | A <sub>3</sub> | A <sub>4</sub><br>max. | b <sub>p</sub> | b <sub>1</sub> | D <sup>(1)</sup> | E <sup>(1)</sup> | e    | e <sub>D</sub> | e <sub>E</sub> | H <sub>D</sub> | H <sub>E</sub> | k              | L <sub>p</sub> | v     | w     | y     | Z <sub>D</sub> <sup>(1)</sup><br>max. | Z <sub>E</sub> <sup>(1)</sup><br>max. | β   |
|--------|----------------|------------------------|----------------|------------------------|----------------|----------------|------------------|------------------|------|----------------|----------------|----------------|----------------|----------------|----------------|-------|-------|-------|---------------------------------------|---------------------------------------|-----|
| mm     | 4.57<br>4.19   | 0.51                   | 0.25           | 3.05                   | 0.53<br>0.33   | 0.81<br>0.66   | 19.20<br>19.05   | 19.20<br>19.05   | 1.27 | 18.54<br>17.53 | 18.54<br>17.53 | 20.19<br>19.94 | 20.19<br>19.94 | 1.22<br>1.07   | 1.44<br>1.02   | 0.18  | 0.18  | 0.1   | 2.16                                  | 2.16                                  | 45° |
| inches | 0.180<br>0.165 | 0.02                   | 0.01           | 0.12                   | 0.021<br>0.013 | 0.032<br>0.026 | 0.756<br>0.750   | 0.756<br>0.750   | 0.05 | 0.73<br>0.69   | 0.73<br>0.69   | 0.795<br>0.785 | 0.795<br>0.785 | 0.048<br>0.042 | 0.057<br>0.040 | 0.007 | 0.007 | 0.004 | 0.085                                 | 0.085                                 |     |

**Note**

1. Plastic or metal protrusions of 0.25 mm (0.01 inch) maximum per side are not included.

| OUTLINE<br>VERSION | REFERENCES |        |          | EUROPEAN<br>PROJECTION | ISSUE DATE           |
|--------------------|------------|--------|----------|------------------------|----------------------|
|                    | IEC        | JEDEC  | JEITA    |                        |                      |
| SOT238-2           | 112E11     | MS-018 | EDR-7319 |                        | 99-12-27<br>01-11-15 |

Fig. 1. Package outline PLCC52 (SOT238-2)

### 3. Soldering

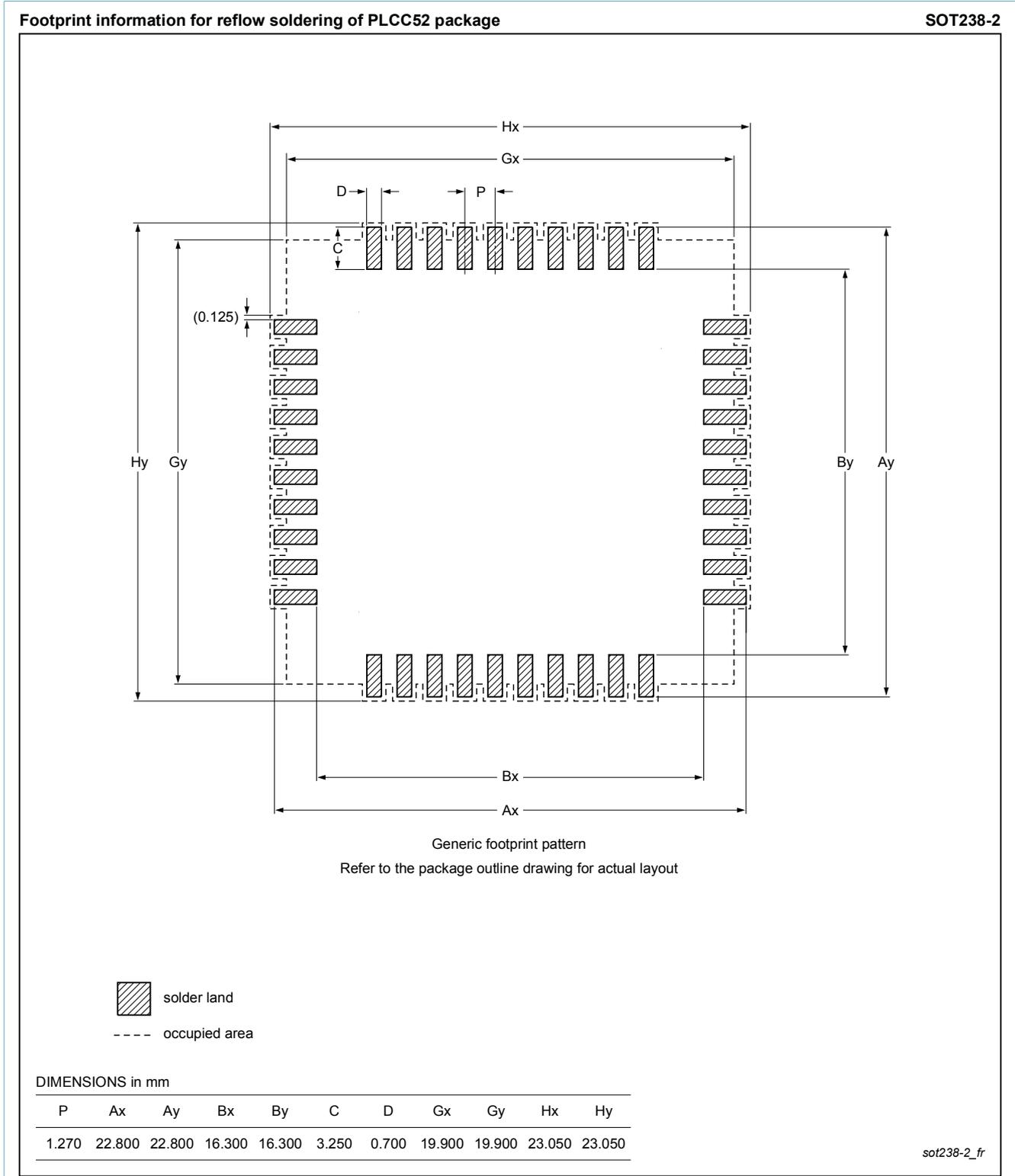


Fig. 2. Reflow soldering footprint for PLCC52 (SOT238-2)

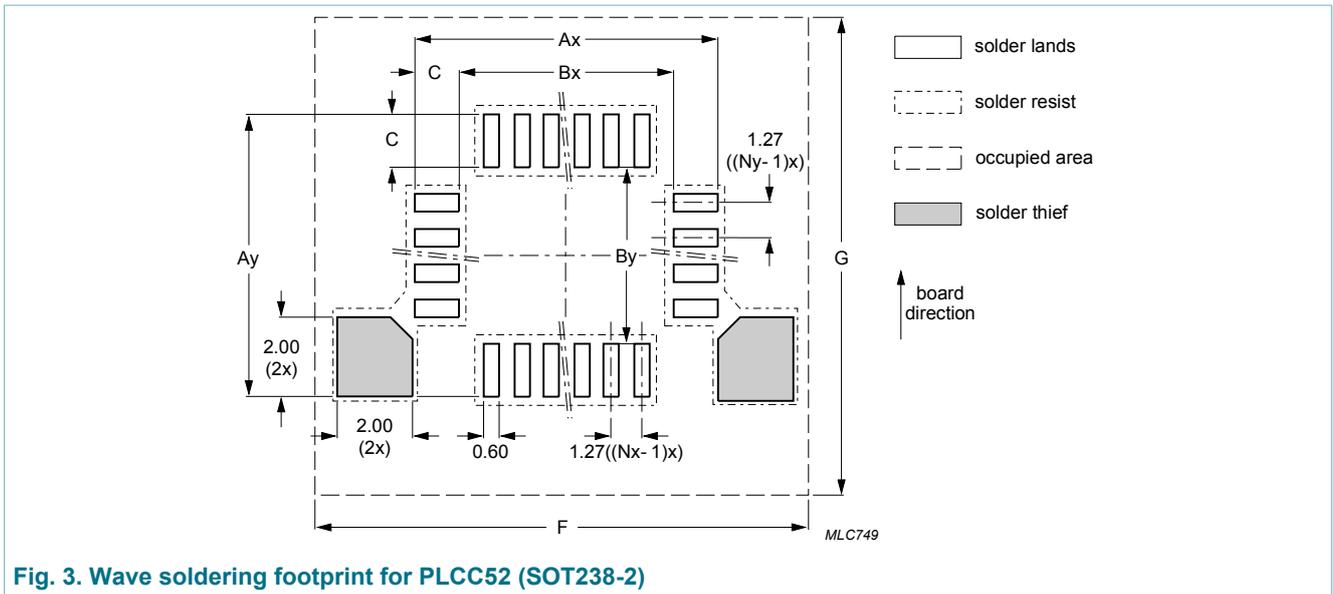


Fig. 3. Wave soldering footprint for PLCC52 (SOT238-2)

## 4. Legal information

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For sales office addresses, please send an email to: [salesaddresses@nxp.com](mailto:salesaddresses@nxp.com)  
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