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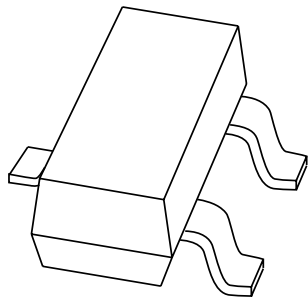
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If you have any questions related to the data sheet, please contact our nearest sales office via e-mail or telephone (details via salesaddresses@nexperia.com). Thank you for your cooperation and understanding,

Kind regards,

Team Nexperia

DATA SHEET



PMBD354

Schottky barrier double diode

Product data sheet
Supersedes data of 2002 Aug 06

2003 Mar 25

Schottky barrier double diode

PMBD354

FEATURES

- Low forward voltage
- Small SMD package
- Low capacitance
- Matched capacitance.

APPLICATIONS

- UHF mixer
- Sampling circuits
- Modulators
- Phase detection.

DESCRIPTION

Planar Schottky barrier double diode in a SOT23 small plastic SMD package.

MARKING

| TYPE NUMBER | MARKING CODE ⁽¹⁾ |
|-------------|-----------------------------|
| PMBD354 | *V8 |

Note

- * = p : Made in Hong Kong.
 * = t : Made in Malaysia.
 * = W : Made in China.

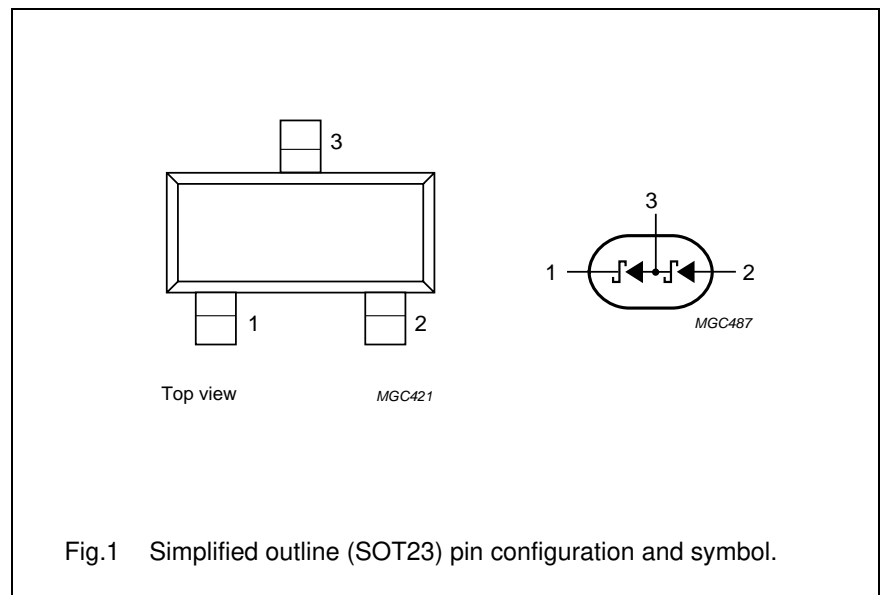
LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 60134).

| SYMBOL | PARAMETER | MIN. | MAX. | UNIT |
|------------------|----------------------------|------|------|------|
| Per diode | | | | |
| V_R | continuous reverse voltage | – | 4 | V |
| I_F | continuous forward current | – | 30 | mA |
| T_{stg} | storage temperature | –65 | +150 | °C |
| T_j | junction temperature | – | 100 | °C |

PINNING

| PIN | DESCRIPTION |
|-----|------------------------------|
| 1 | cathode k_1 |
| 2 | anode a_2 |
| 3 | common connection a_1, k_2 |



Schottky barrier double diode

PMBD354

ELECTRICAL CHARACTERISTICS $T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified.

| SYMBOL | PARAMETER | CONDITIONS | MAX. | UNIT |
|------------------|----------------------|---|-------------------|----------------|
| Per diode | | | | |
| V_F | forward voltage | see Fig.2 $I_F = 0.1\text{ mA}$ $I_F = 1\text{ mA}$ $I_F = 10\text{ mA}$ | 350 450 600 | mV mV mV |
| I_R | reverse current | $V_R = 3\text{ V}$; note 1; see Fig.3 | 0.25 | μA |
| C_d | diode capacitance | $f = 1\text{ MHz}$; $V_R = 0$; see Fig.4 | 1 | pF |
| ΔC_d | capacitance matching | $f = 1\text{ MHz}$; $V_R = 0$ | 0.1 | pF |

Note

1. Pulse test: $t_p = 300\text{ }\mu\text{s}$; $\delta = 0.02$.

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|---------------|---|------------|-------|------|
| $R_{th\ j-a}$ | thermal resistance from junction to ambient | note 1 | 500 | K/W |

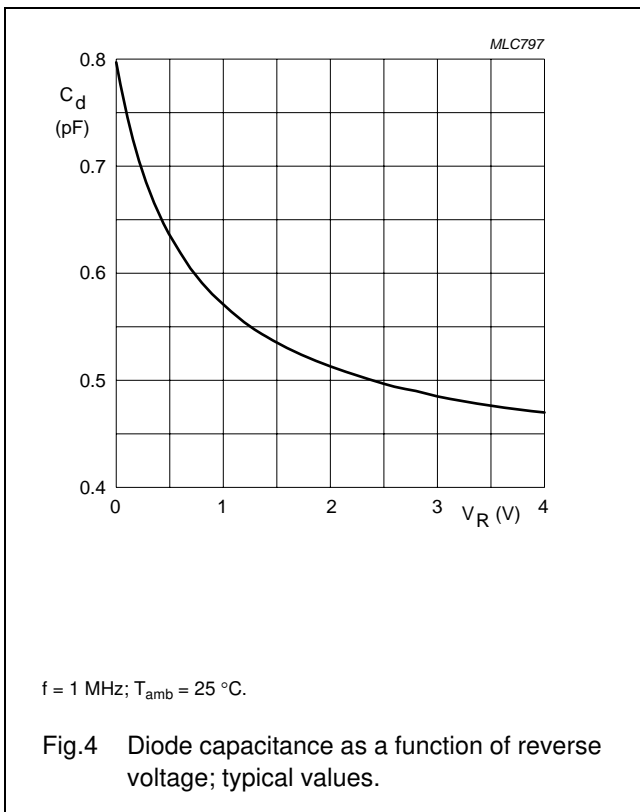
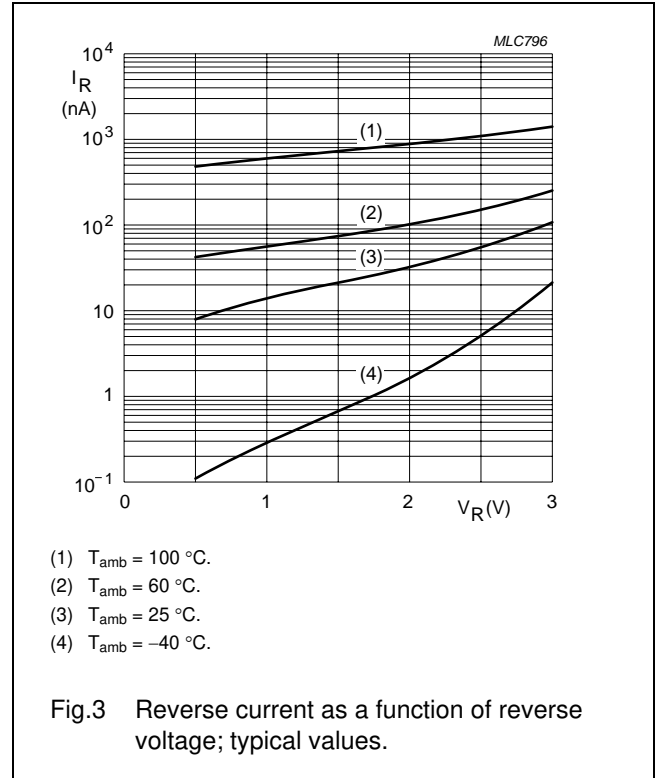
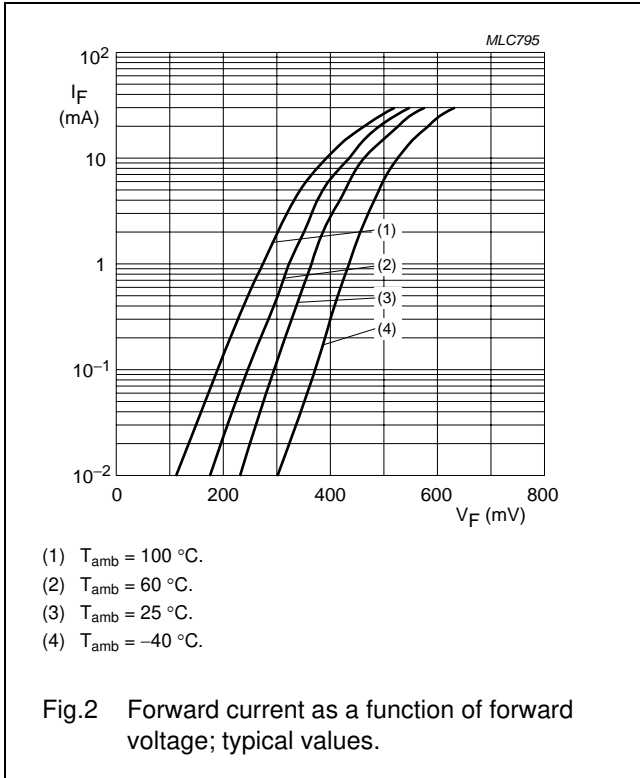
Note

1. Refer to SOT23 standard mounting conditions.

Schottky barrier double diode

PMBD354

GRAPHICAL DATA



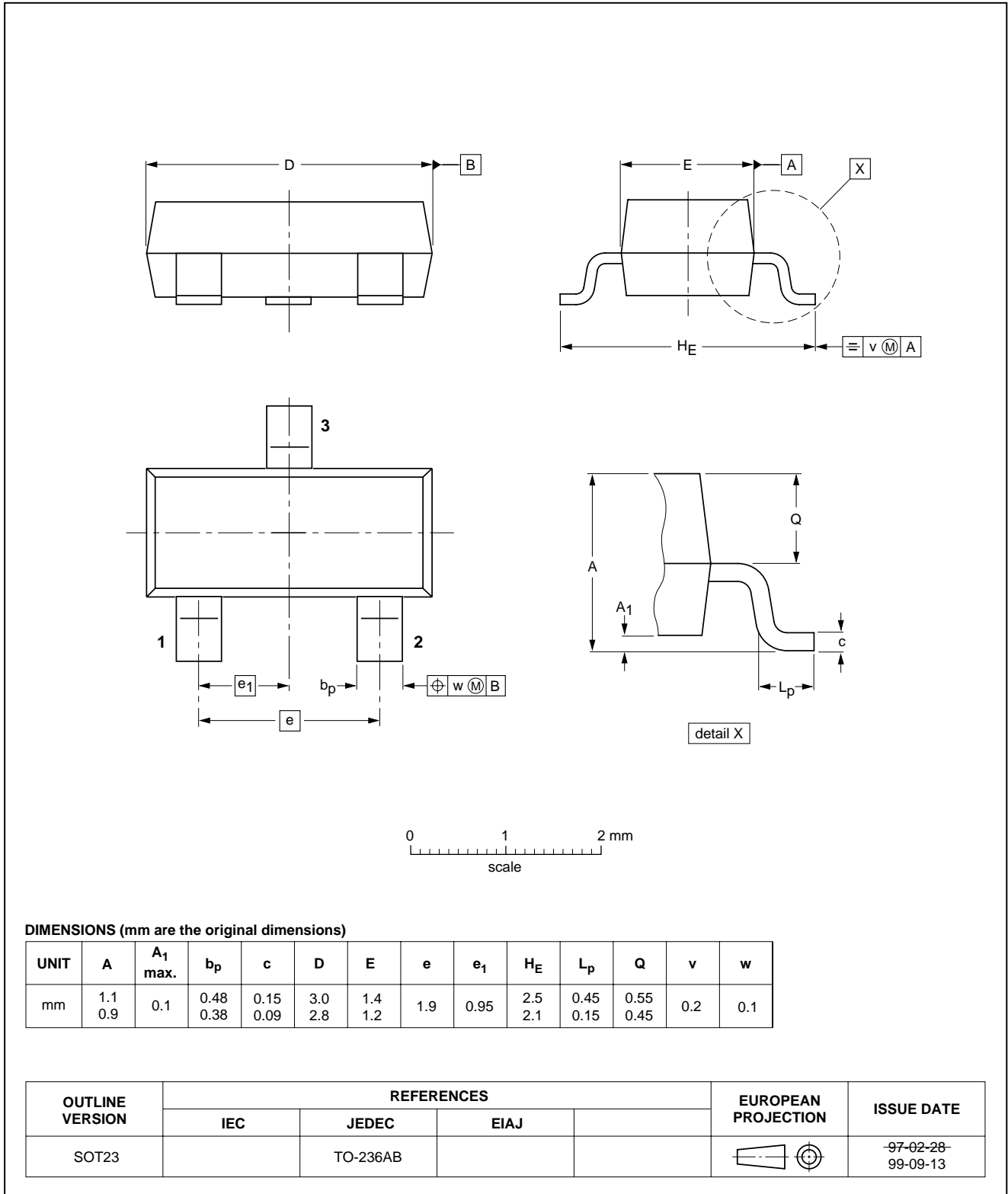
Schottky barrier double diode

PMBD354

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT23



Schottky barrier double diode

PMBD354

DATA SHEET STATUS

| DOCUMENT STATUS ⁽¹⁾ | PRODUCT STATUS ⁽²⁾ | DEFINITION |
|--------------------------------|-------------------------------|---|
| Objective data sheet | Development | This document contains data from the objective specification for product development. |
| Preliminary data sheet | Qualification | This document contains data from the preliminary specification. |
| Product data sheet | Production | This document contains the product specification. |

Notes

1. Please consult the most recently issued document before initiating or completing a design.
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NXP Semiconductors

Customer notification

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Contact information

For additional information please visit: **<http://www.nxp.com>**

For sales offices addresses send e-mail to: **salesaddresses@nxp.com**

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