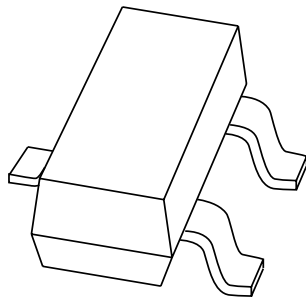


# DATA SHEET



**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

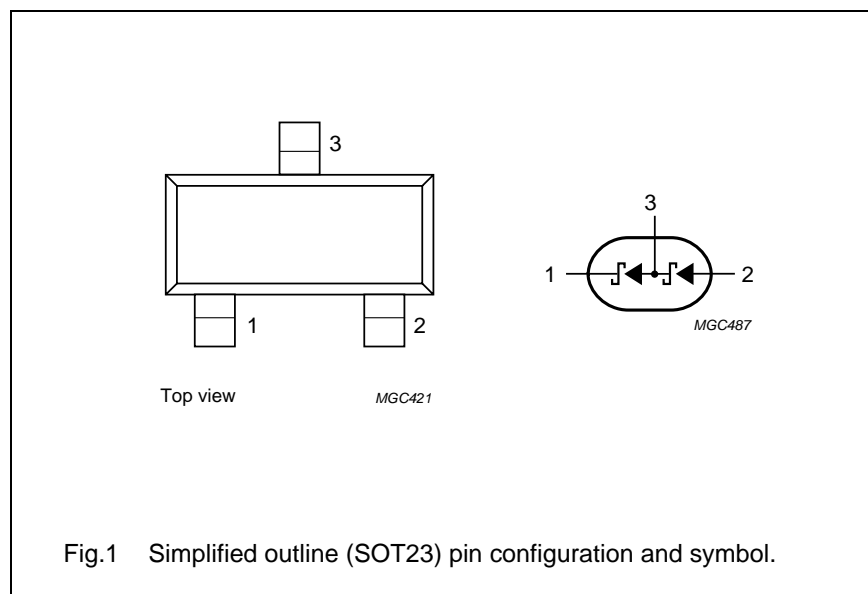
Planar Schottky barrier double diode in a SOT23 small plastic SMD package.

## MARKING

TYPE NUMBER	MARKING CODE <sup>(1)</sup>
PMBD354	*V8

## PINNING

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



## 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
<b>Per diode</b>				
$V_R$	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

## Schottky barrier double diode

## PMBD354

**ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MAX.	UNIT
<b>Per diode</b>				
$V_F$	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	$\mu\text{A}$
$C_d$	diode capacitance	$f = 1\text{ MHz}$ ; $V_R = 0$ ; see Fig.4	1	pF
$\Delta C_d$	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
$R_{\text{th j-a}}$	thermal resistance from junction to ambient	note 1	500	K/W

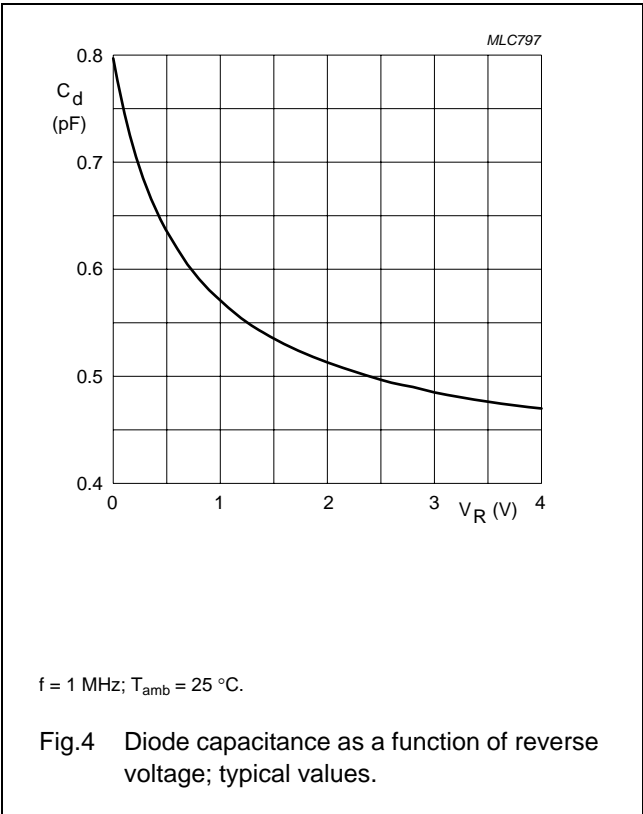
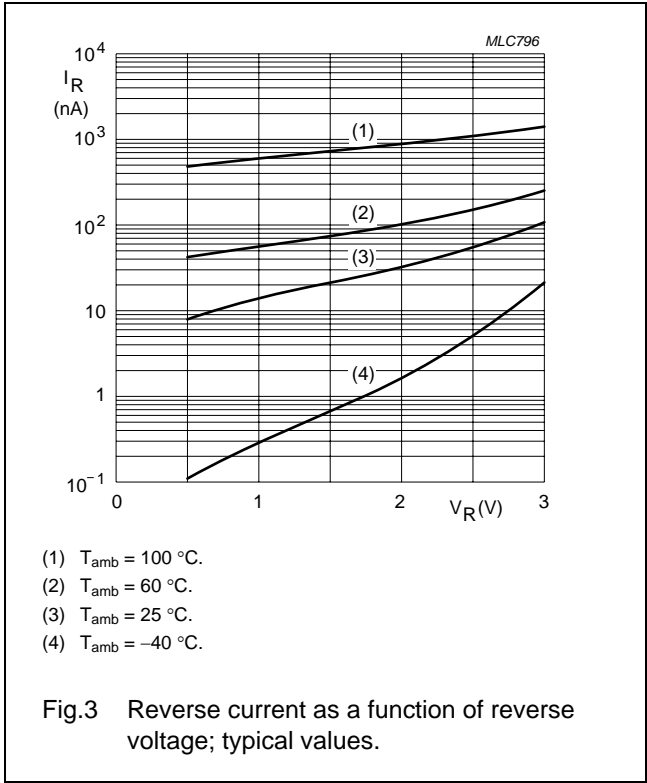
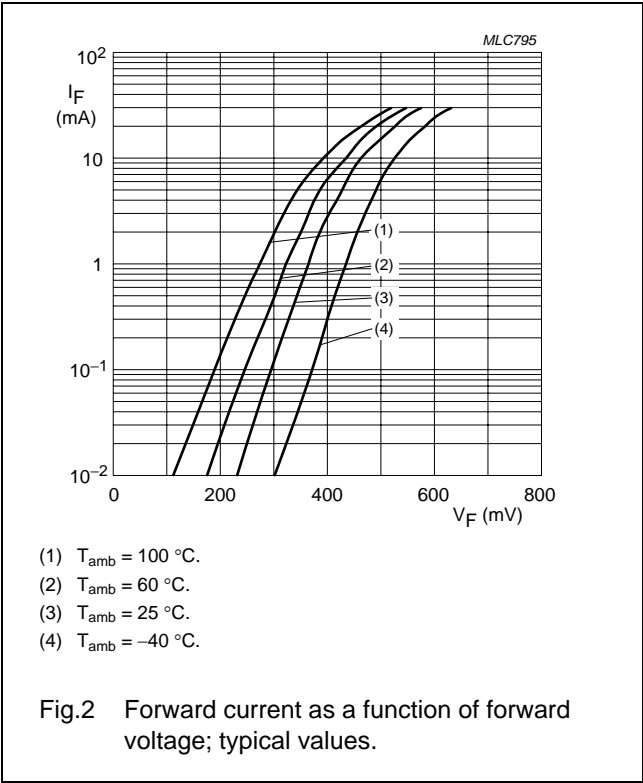
**Note**

1. Refer to SOT23 standard mounting conditions.

Schottky barrier double diode

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GRAPHICAL DATA



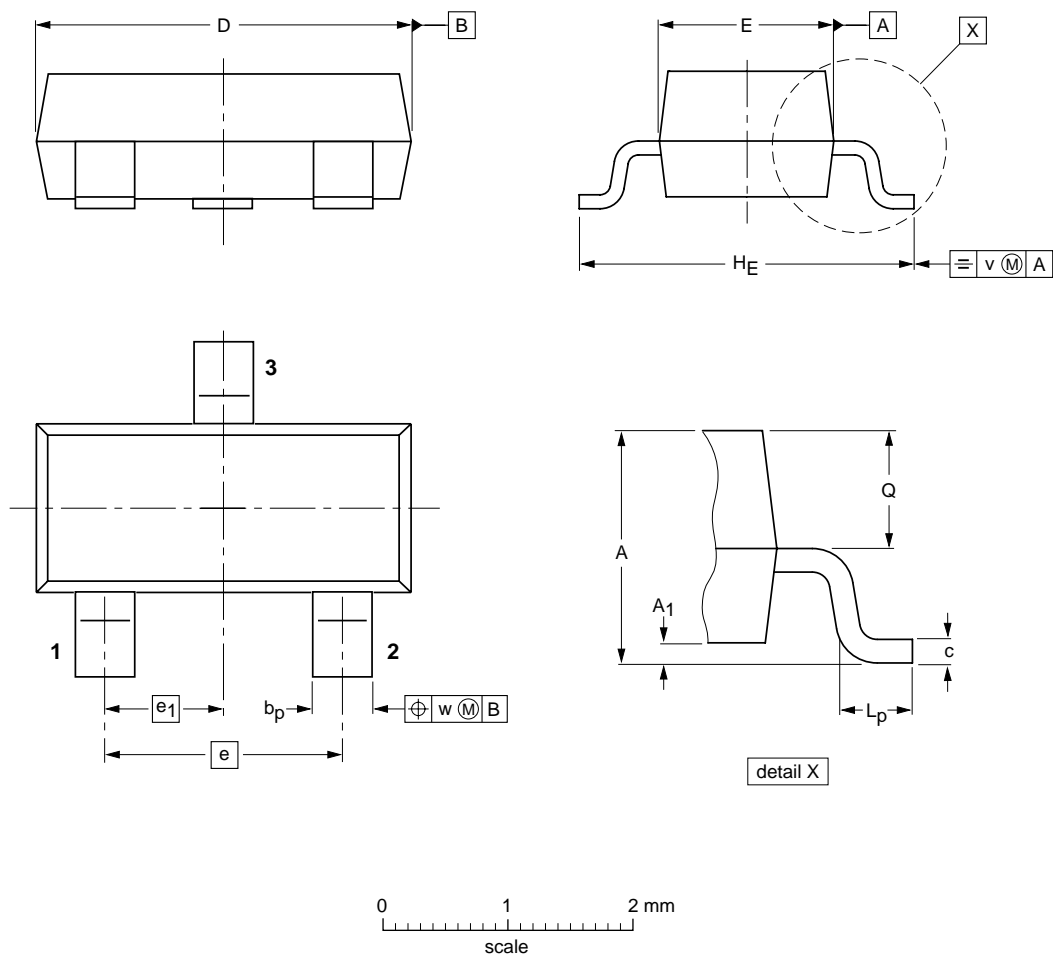
Schottky barrier double diode

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PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A <sub>1</sub> max.	b <sub>p</sub>	c	D	E	e	e <sub>1</sub>	H <sub>E</sub>	L <sub>p</sub>	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

OUTLINE VERSION	REFERENCES				EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	EIAJ			
SOT23		TO-236AB				<del>97-02-28</del> 99-09-13

## Schottky barrier double diode

PMBD354

## DATA SHEET STATUS

DOCUMENT STATUS <sup>(1)</sup>	PRODUCT STATUS <sup>(2)</sup>	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.

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## **Contact information**

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