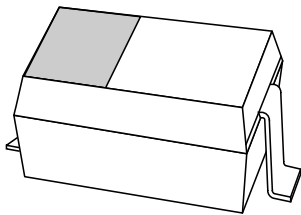


DATA SHEET



1PS76SB17 Schottky barrier diode

Product specification
Supersedes data of 1999 May 25

2002 Aug 09

Schottky barrier diode

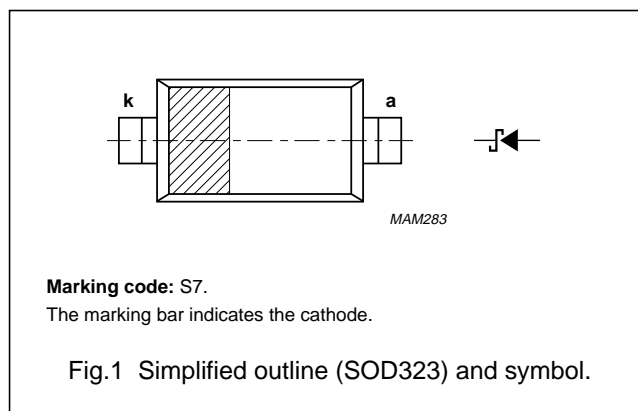
1PS76SB17

FEATURES

- Low forward voltage
- Low diode capacitance
- ESD > 500 V; Human body model
- Very small plastic SMD package.

APPLICATIONS

- UHF mixers
- Sampling circuits
- Modulators
- Phase detectors.



DESCRIPTION

Planar Schottky barrier diode encapsulated in a SOD323 very small plastic SMD package.

LIMITING VALUES

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

SYMBOL	PARAMETER	MIN.	MAX.	UNIT
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

ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	TYP.	MAX.	UNIT
V_F	forward voltage	see Fig.2 $I_F = 0.1\text{ mA}$ $I_F = 1\text{ mA}$ $I_F = 10\text{ mA}$	– 360 470	300 450 600	mV mV mV
I_R	reverse current	$V_R = 3\text{ V}$; see Fig.3	0.15	0.25	μA
C_d	diode capacitance	$f = 1\text{ MHz}$; $V_R = 0\text{ V}$; see Fig.4	0.8	1	pF
		$f = 1\text{ MHz}$; $V_R = 0.5\text{ V}$; see Fig.4	0.65	–	pF

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$R_{th\ j-a}$	thermal resistance from junction to ambient	note 1	450	K/W

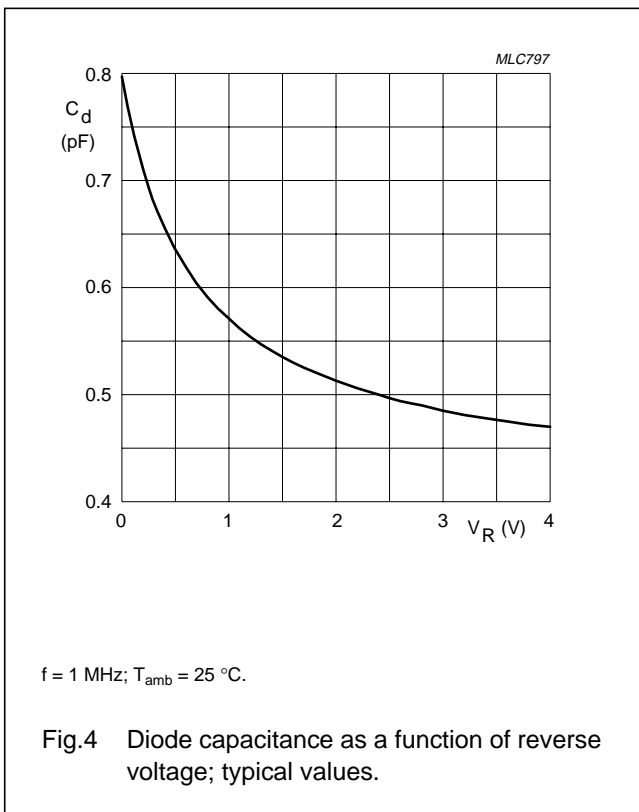
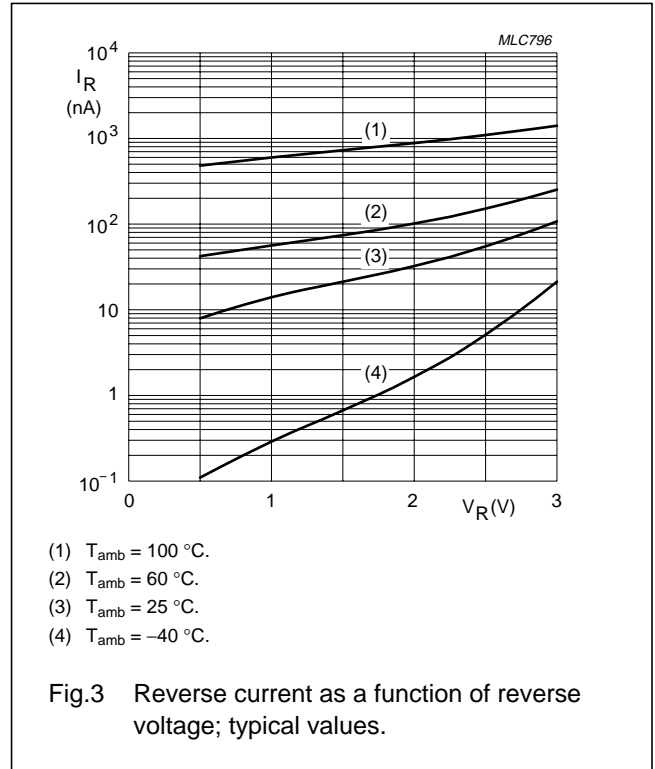
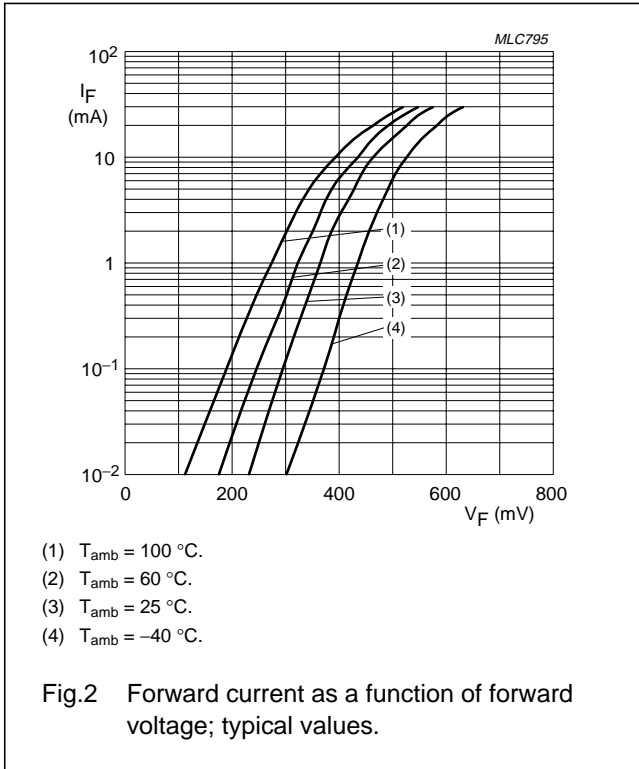
Note

1. Refer to SOD323 standard mounting conditions.

Schottky barrier diode

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GRAPHICAL DATA



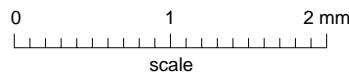
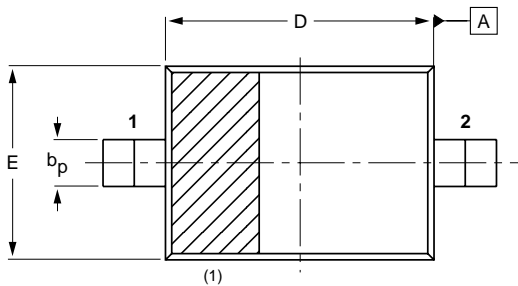
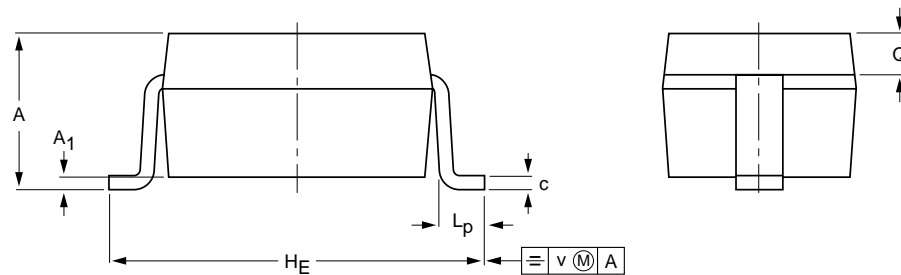
Schottky barrier diode

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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD323



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	H _E	L _p	Q	v
mm	1.1 0.8	+0.05 -0.05	0.40 0.25	0.25 0.10	1.8 1.6	1.35 1.15	2.7 2.3	0.45 0.15	0.25 0.15	0.2

Note

1. The marking bar indicates the cathode.

OUTLINE VERSION	REFERENCES			EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	EIAJ		
SOD323			SC-76		98-09-14 99-09-13

Schottky barrier diode

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DATA SHEET STATUS

DATA SHEET STATUS ⁽¹⁾	PRODUCT STATUS ⁽²⁾	DEFINITIONS
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Schottky barrier diode

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NOTES

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NOTES

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Printed in The Netherlands

613514/03/pp8

Date of release: 2002 Aug 09

Document order number: 9397 750 10174

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