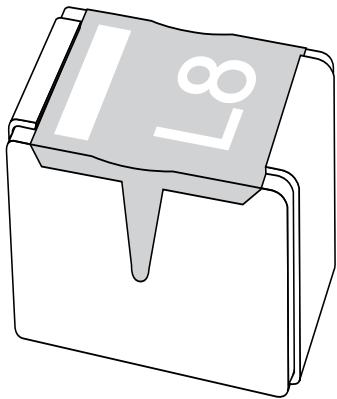


DATA SHEET



BA792 Band-switching diode

Product specification
Supersedes data of 1996 Mar 13

2002 Jun 12

Band-switching diode

BA792

FEATURES

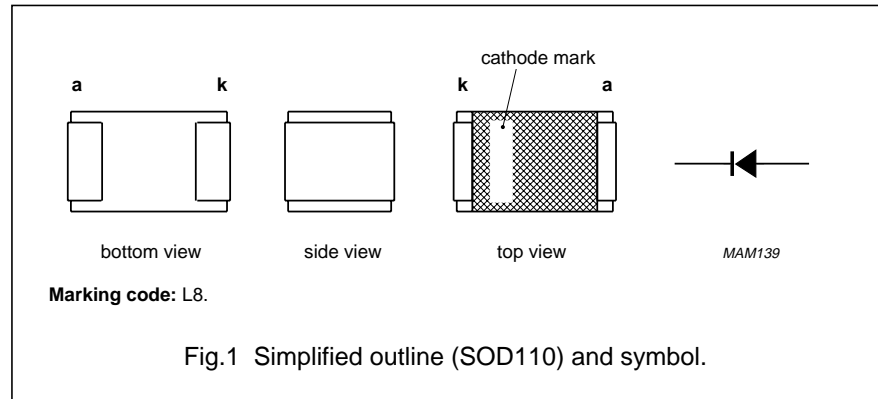
- Ceramic SMD package
- Low diode capacitance:
max. 1.1 pF
- Low diode forward resistance:
max. 0.7 Ω .

APPLICATIONS

- Low loss band-switching in VHF television tuners
- Surface mount high-speed switching circuits.

DESCRIPTION

Planar, high performance band-switching diode in a SOD110 very small ceramic SMD package.



LIMITING VALUES

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

SYMBOL	PARAMETER	MIN.	MAX.	UNIT
V_R	continuous reverse voltage	–	35	V
I_F	continuous forward current	–	100	mA
T_{stg}	storage temperature	–65	+150	$^{\circ}\text{C}$
T_j	junction temperature	–	150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MAX.	UNIT
V_F	forward voltage	$I_F = 100\text{ mA}$	1.1	V
I_R	reverse current	$V_R = 20\text{ V}$	10	nA
		$V_R = 20\text{ V}; T_{amb} = 75\text{ }^{\circ}\text{C}$	1	μA
C_d	diode capacitance	$V_R = 3\text{ V}; f = 1\text{ to }100\text{ MHz}; \text{note } 1$	1.1	pF
r_D	diode forward resistance	$I_F = 3\text{ mA}; f = 200\text{ MHz}; \text{note } 1$	0.7	Ω

Note

1. Guaranteed on AQL basis: inspection level S4, AQL 1.0.

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$R_{th\ j-a}$	thermal resistance from junction to ambient	note 1	315	K/W

Note

1. Device mounted on a printed-circuit board measuring $11 \times 25 \times 1.6\text{ mm}$.

Band-switching diode

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PACKAGE OUTLINE

Very small ceramic rectangular surface mounted package

SOD110

DIMENSIONS (mm are the original dimensions)

UNIT	A max.	D	E	y
mm	1.6	2.10 1.90	1.40 1.10	0.1

OUTLINE VERSION	REFERENCES				EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	EIAJ			
SOD110						97-04-14

Band-switching diode

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DATA SHEET STATUS

DATA SHEET STATUS ⁽¹⁾	PRODUCT STATUS ⁽²⁾	DEFINITIONS
Objective data	Development	This data sheet contains data from the objective specification for product development. Philips Semiconductors reserves the right to change the specification in any manner without notice.
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NOTES

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