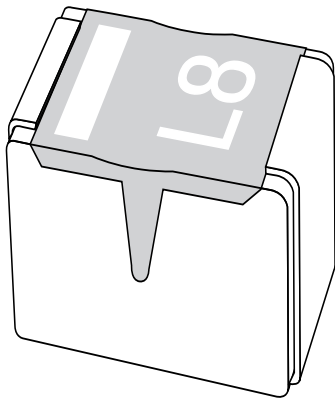


DATA SHEET



BA792 Band-switching diode

Product specification
Supersedes data of 1996 Mar 13

2002 Jun 12

Band-switching diode

BA792

FEATURES

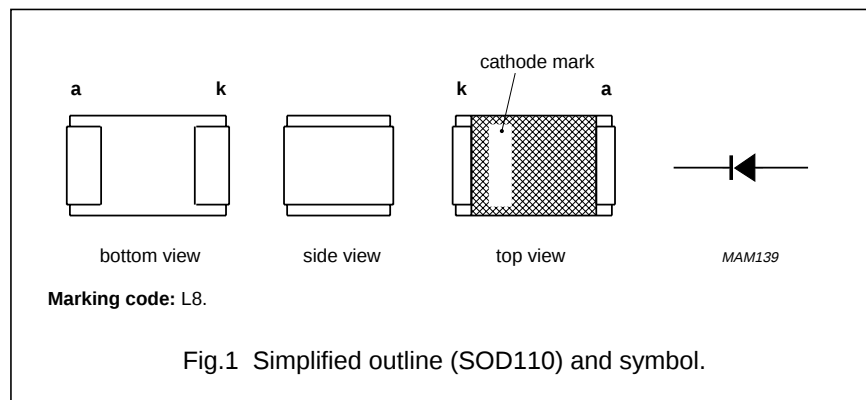
- Ceramic SMD package
- Low diode capacitance:
max. 1.1 pF
- Low diode forward resistance:
max. 0.7 Ω .

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	°C
T_j	junction temperature	—	150	°C

ELECTRICAL CHARACTERISTICS

$T_j = 25\text{ °C}$ 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
		$V_R = 20\text{ V}; T_{amb} = 75\text{ °C}$	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 $11 \times 25 \times 1.6\text{ mm}$.

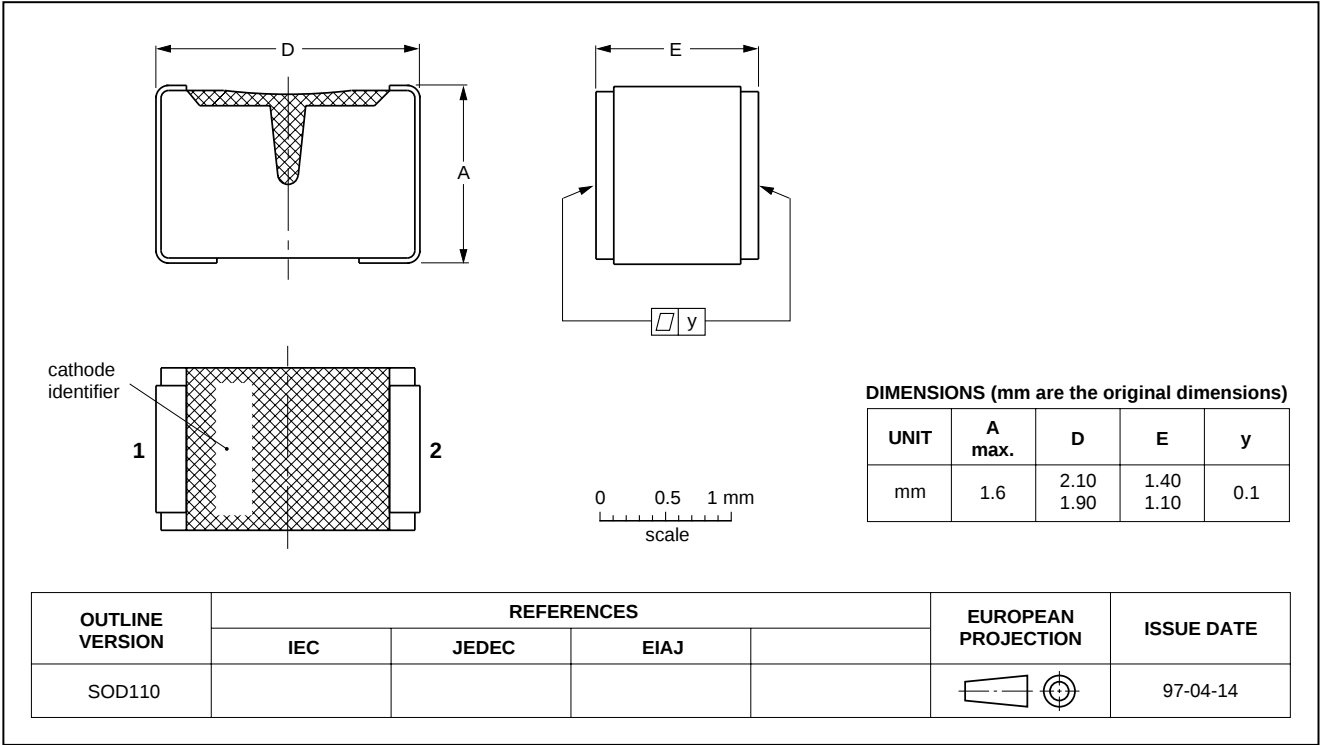
Band-switching diode

BA792

PACKAGE OUTLINE

Very small ceramic rectangular surface mounted package

SOD110



Band-switching diode

BA792

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.
Preliminary data	Qualification	This data sheet contains data from the preliminary specification. Supplementary data will be published at a later date. Philips Semiconductors reserves the right to change the specification without notice, in order to improve the design and supply the best possible product.
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Notes

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2. The product status of the device(s) described in this data sheet may have changed since this data sheet was published. The latest information is available on the Internet at URL <http://www.semiconductors.philips.com>.

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Band-switching diode

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NOTES

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