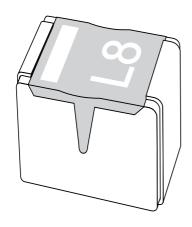
## **DISCRETE SEMICONDUCTORS**

## DATA SHEET



# **BA792**Band-switching diode

Product specification Supersedes data of 1996 Mar 13 2002 Jun 12





## **Band-switching diode**

**BA792** 

#### **FEATURES**

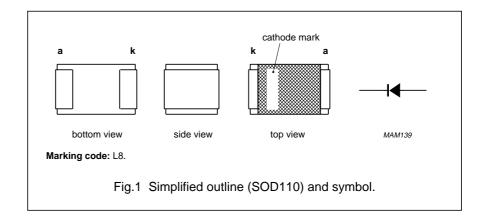
- · Ceramic SMD package
- Low diode capacitance: max. 1.1 pF
- Low diode forward resistance: max. 0.7 Ω.

#### **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 <sub>R</sub>	continuous reverse voltage		35	V
I <sub>F</sub>	continuous forward current	us forward current – 100 mA		mA
T <sub>stg</sub>	storage temperature	-65	+150	°C
Tj	junction temperature	_	150	°C

#### **ELECTRICAL CHARACTERISTICS**

 $T_i = 25$  °C unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	MAX.	UNIT
V <sub>F</sub>	forward voltage	I <sub>F</sub> = 100 mA	1.1	V
I <sub>R</sub>	reverse current	V <sub>R</sub> = 20 V	10	nA
		V <sub>R</sub> = 20 V; T <sub>amb</sub> = 75 °C	1	μΑ
C <sub>d</sub>	diode capacitance	V <sub>R</sub> = 3 V; f = 1 to 100 MHz; note 1	1.1	pF
r <sub>D</sub>	diode forward resistance	I <sub>F</sub> = 3 mA; f = 200 MHz; 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 <sub>th j-a</sub>	thermal resistance from junction to ambient	note 1	315	K/W

#### Note

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

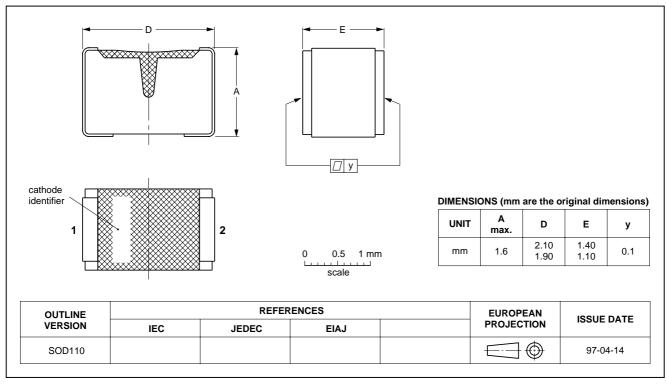
## Band-switching diode

**BA792** 

#### **PACKAGE OUTLINE**

#### Very small ceramic rectangular surface mounted package

SOD110



### Band-switching diode

**BA792** 

#### **DATA SHEET STATUS**

DATA SHEET STATUS(1)	PRODUCT STATUS <sup>(2)</sup>	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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## Band-switching diode

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#### **Contact information**

For additional information please visit http://www.semiconductors.philips.com. Fax: +31 40 27 24825 For sales offices addresses send e-mail to: sales.addresses@www.semiconductors.philips.com.

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