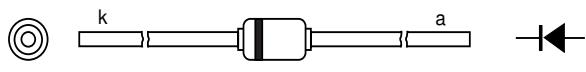


**Band-switching diodes****BA482; BA483; BA484****FEATURES**

- Continuous reverse voltage:  
max. 35 V
- Continuous forward current:  
max. 100 mA
- Low diode capacitance:  
max. 1.0 to 1.6 pF
- Low diode forward resistance:  
max. 0.7 to 1.2 Ω.

**DESCRIPTION**

Planar high performance band-switching diode in a hermetically sealed glass SOD68 (DO-34) package.



The diodes are type branded.

**APPLICATION**

- VHF television tuners.

Fig.1 Simplified outline (SOD68; DO-34) and symbol.

**LIMITING VALUES**

In accordance with the Absolute Maximum Rating System (IEC 134).

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**

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

SYMBOL	PARAMETER	CONDITIONS	TYP.	MAX.	UNIT
$V_F$	forward voltage	$I_F = 100 \text{ mA}$ ; see Fig.2	–	1.2	V
$I_R$	reverse current	$V_R = 20 \text{ V}$ $V_R = 20 \text{ V}; T_{amb} = 75^\circ\text{C}$	– –	100 1	nA μA
$C_d$	diode capacitance BA482 BA483 BA484	$f = 1 \text{ to } 100 \text{ MHz}$ ; $V_R = 3 \text{ V}$ ; see Fig.4	0.8 0.7 1.0	1.2 1.0 1.6	pF pF pF
$r_D$	diode forward resistance BA482 BA483 BA484	$I_F = 3 \text{ mA}$ ; $f = 200 \text{ MHz}$ ; see Fig.5	0.6 0.8 0.8	0.7 1.2 1.2	Ω Ω Ω

## Band-switching diodes

BA482; BA483; BA484

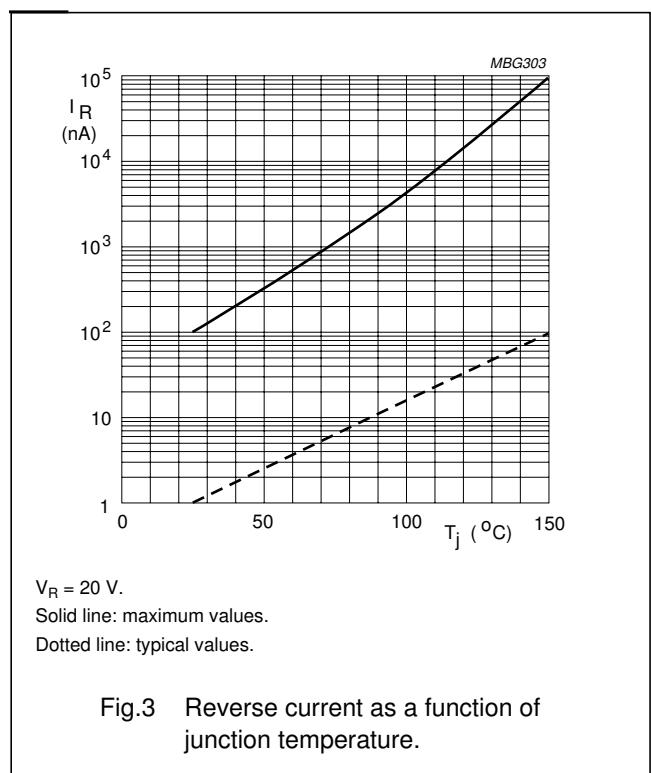
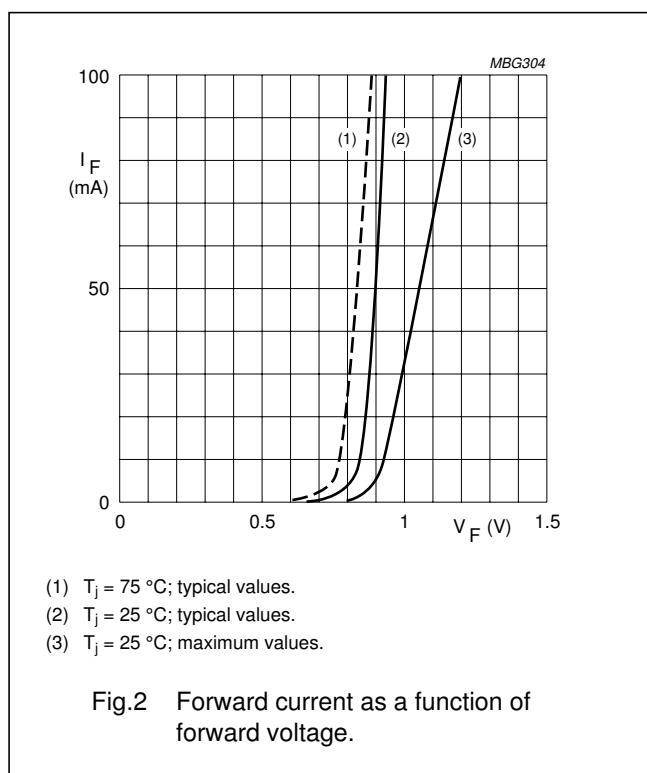
## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$R_{th\ j\ -tp}$	thermal resistance from junction to tie-point	lead length 10 mm	300	K/W
$R_{th\ j\ -a}$	thermal resistance from junction to ambient	lead length 10 mm; note 1	500	K/W

**Note**

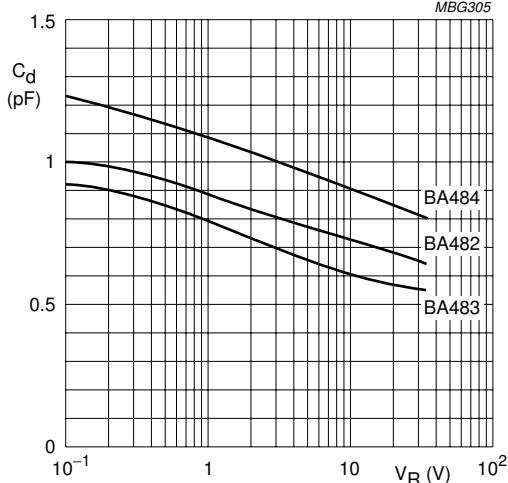
1. Device mounted on a FR4 printed-circuit board without metallization pad.

## GRAPHICAL DATA



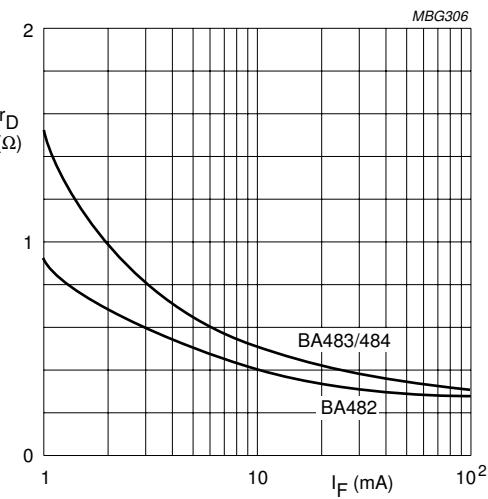
## Band-switching diodes

BA482; BA483; BA484



$f = 1$  to  $100$  MHz;  $T_j = 25$  °C.

Fig.4 Diode capacitance as a function of reverse voltage; typical values.



$f = 200$  MHz;  $T_j = 25$  °C.

Fig.5 Diode forward resistance as a function of forward current; typical values.