

SILICON PLANAR DIODES

Switching diodes in the subminiature DO-34 glass envelope, intended for band switching in v.h.f. television tuners. Special feature of the diodes is their low capacitance.

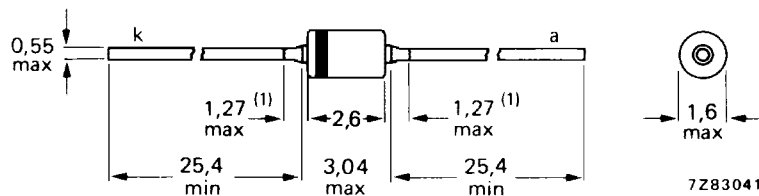
QUICK REFERENCE DATA

Continuous reverse voltage	V_R	max.	35 V		
Forward current (d.c.)	I_F	max.	100 mA		
Junction temperature	T_j	max.	150 °C		
<hr/>					
			BA482	BA483	BA484
Diode capacitance $V_R = 3 \text{ V}; f = 1 \text{ to } 100 \text{ MHz}$	C_d	<	1,2	1,0	1,6 pf
Series resistance at $f = 200 \text{ MHz}$ $I_F = 3 \text{ mA}$	r_D	<	0,7	1,2	Ω
$I_F = 10 \text{ mA}$	r_D	typ.	0,4	0,5	Ω

MECHANICAL DATA

Dimension: in mm

Fig. 1 SOD-68 (DO-34).



- (1) Lead diameter in this zone uncontrolled.
The marking band indicates the cathode.
The diodes are type branded.

RATINGS

Limiting values in accordance with the Absolute Maximum System (IEC 134)

Continuous reverse voltage	V_R	max.	35 V
Forward current (d.c.)	I_F	max.	100 mA
Storage temperature	T_{stg}		-65 to + 150 °C
Junction temperature	T_j	max.	150 °C

THERMAL RESISTANCE

From junction to ambient mounted on printed board
 lead length = 5,0 mm

$$R_{th\ j-a} = 0,6\ K/mW$$

CHARACTERISTICS

$T_j = 25\ ^\circ C$ unless otherwise specified

Forward voltage

$$I_F = 100\ mA$$

$$V_F < 1,2\ V$$

Reverse current

$$V_R = 20\ V$$

$$I_R < 100\ nA$$

$$V_R = 20\ V; T_{amb} = 75\ ^\circ C$$

$$I_R < 1\ \mu A$$

Diode capacitance

$$V_R = 3\ V; f = 1\ to\ 100\ MHz$$

		BA482	BA483	BA484	
C_d	typ.	0,8	0,7	1,0	pF
	<	1,2	1,0	1,6	pF

Series resistance at $f = 200\ MHz$

$$I_F = 3\ mA$$

		BA482	BA483	BA484	
r_D	typ.	0,6	0,8	0,8	Ω
	<	0,7	1,2	1,2	Ω

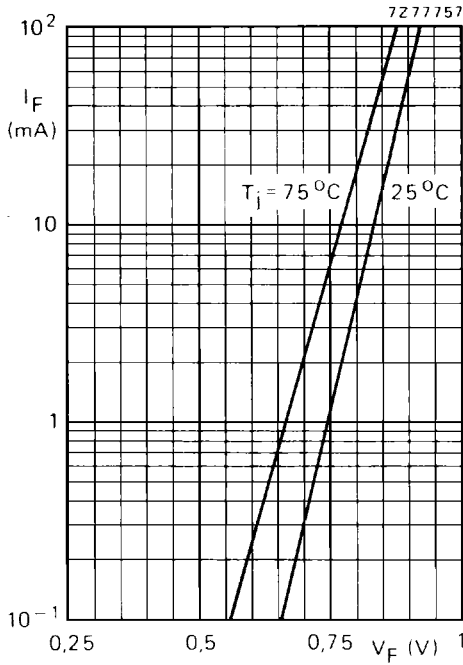


Fig. 2 Typical values.

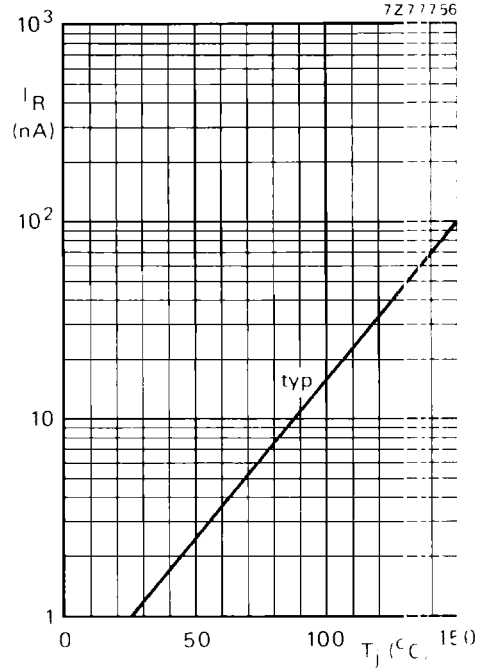


Fig. 3 $V_R = 20$ V.

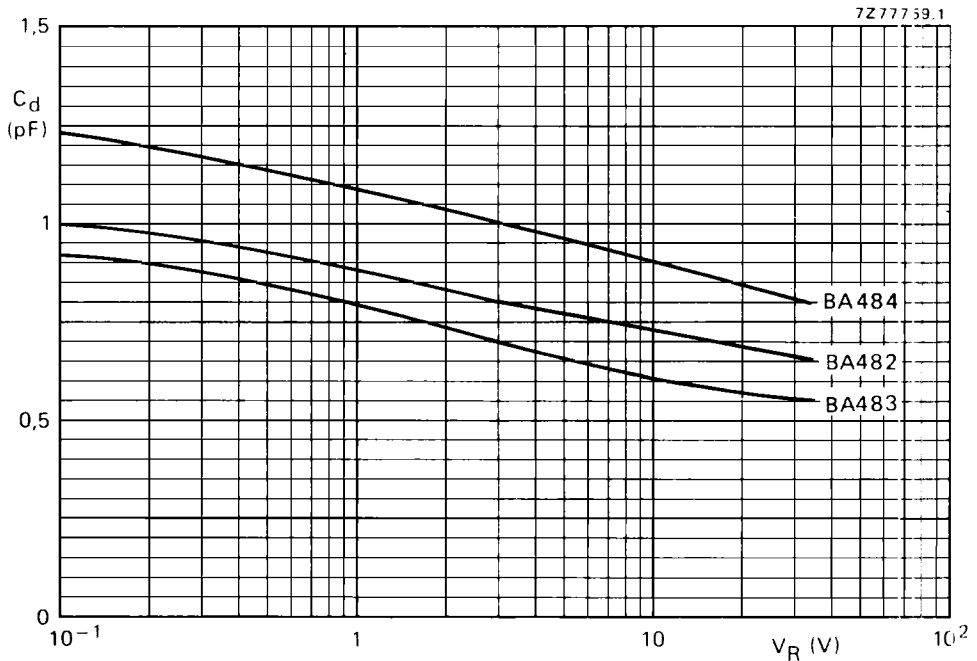


Fig. 4 Typical values; $f = 1$ to 100 MHz; $T_j = 25^\circ\text{C}$.

BA482
3A483
3A484

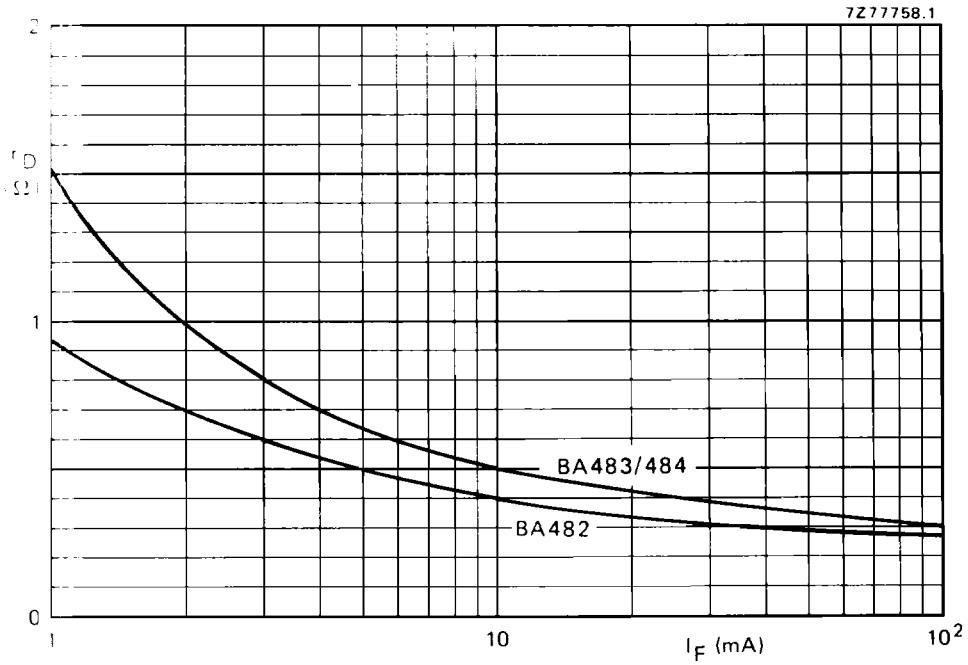


Fig. 5 Typical values; $f = 200$ MHz; $T_j = 25$ °C.