

Variable capacitance diode

BB119

FEATURES

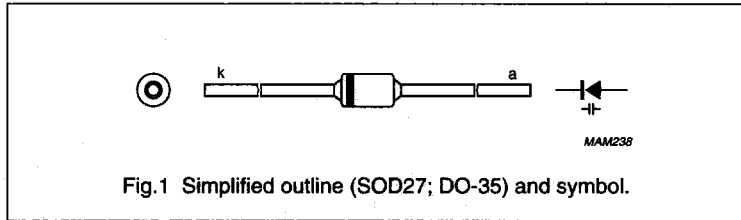
- Hermetically sealed leaded glass SOD27 (DO-35) package
- C10: 17 pF; ratio: 1.3.

APPLICATIONS

- Automatic frequency control.

DESCRIPTION

The BB119 is a variable capacitance diode, fabricated in planar technology, and encapsulated in the hermetically sealed leaded glass SOD27 (DO-35) package.



LIMITING VALUES

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

SYMBOL	PARAMETER	MIN.	MAX.	UNIT
V_R	continuous reverse voltage	–	15	V
I_F	continuous forward current	–	200	mA
T_{stg}	storage temperature	–55	+150	°C
T_j	operating junction temperature	–	150	°C

ELECTRICAL CHARACTERISTICS

$T_j = 25\text{ °C}$; unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
I_R	reverse current	$V_R = 15\text{ V}$; see Fig.3	–	–	50	nA
		$V_R = 15\text{ V}$; $T_j = 150\text{ °C}$; see Fig.3	–	–	2	μA
r_s	diode series resistance	$f = 200\text{ MHz}$; note 1	–	0.2	1.5	Ω
C_d	diode capacitance	$V_R = 4\text{ V}$; $f = 1\text{ MHz}$; see Figs 2 and 4	20	–	25	pF
		$V_R = 10\text{ V}$; $f = 1\text{ MHz}$; see Figs 2 and 4	–	17	–	pF
$\frac{C_{d(4V)}}{C_{d(10V)}}$	capacitance ratio	$f = 1\text{ MHz}$	1.3	–	–	

Note

1. $V_R = 4\text{ V}$.

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GRAPHICAL DATA

