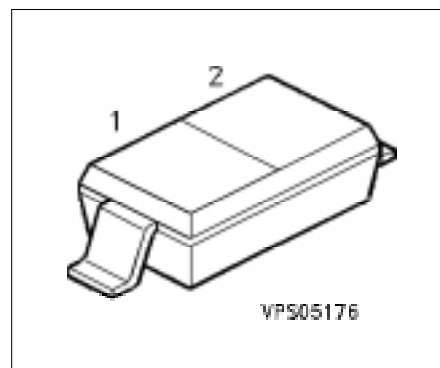


### Preliminary data

#### Features

- Extended frequency range up to 2.8 GHz ; special design for use in TV-sat indoor units
- High capacitance ratio



Type	Marking	Ordering Code (tape and reel)	Pin Configuration		Package
			1	2	
BB 835	yellow X	Q62702-B802	C	A	SOD-323

#### Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	$V_R$	30	V
Reverse voltage ( $R \geq 5 \text{ k}\Omega$ )	$V_{RM}$	35	V
Forward current	$I_F$	20	mA
Operating temperature range	$T_{OP}$	- 55... +150	°C
Storage temperature range	$T_{stg}$	- 55... +150	°C

#### Thermal Resistance

Junction - ambient <sup>1)</sup>	$R_{thJA}$	$\leq 450$	K/W
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<sup>1)</sup> For detailed information see chapter Package Outline

## Electrical Characteristics

at  $T_A = 25\text{ °C}$ , unless otherwise specified.

Parameter	Symbol	Value			Unit
		min.	typ.	max.	

### DC Characteristics

Reverse current $V_R = 30\text{ V}$ $V_R = 30\text{ V}, T_A = 85\text{ °C}$	$I_R$	– –	– –	10 200	nA
Diode capacitance $V_R = 1\text{ V}, f = 1\text{ MHz}$ $V_R = 28\text{ V}, f = 1\text{ MHz}$	$C_T$	8.5 0.5	9.1 0.62	10 0.75	pF
Capacitance ratio $V_R = 1\text{ V}, 28\text{ V}, f = 1\text{ MHz}$	$C_{T1}/C_{T28}$	13.5	14.7	–	–
Capacitance matching $V_R = 1\dots 28\text{ V}, f = 1\text{ MHz}$	$\Delta C_T/C_T$	–	–	3	%
Series resistance $V_R = 1\text{ V}, f = 470\text{ MHz}$	$r_s$	–	2.4	–	$\Omega$
Series inductance	$L_S$	–	1.4	–	nH

**Diode capacitance**  $C_T = f(V_R)$   
 $f = 1\text{ MHz}$ .

