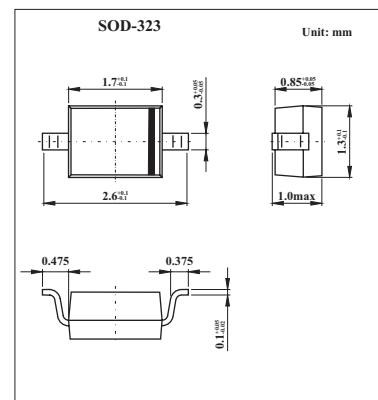


## BA595

### ■ Features

- Current-controlled RF resistor for switching and attenuating applications
- Frequency range 1 MHz ... 2 GHz
- Especially useful as antenna switch in TV-sat tuners
- Very low harmonics



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Value	Unit
Diode reverse voltage	V <sub>R</sub>	50	V
Forward current	I <sub>F</sub>	50	mA
Junction temperature	T <sub>j</sub>	150	°C
Operating temperature range	T <sub>op</sub>	-55 to +125	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C
Junction - soldering point <sup>1)</sup>	R <sub>thJS</sub>	≤ 370	K/W

Note

1. For calculation of R<sub>thJA</sub> please refer to Application Note Thermal Resistance

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 30 V			20	nA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 50 mA			1.1	V
Diode capacitance	C <sub>T</sub>	V <sub>R</sub> = 0 V, f = 100 MHz		0.26	0.4	pF
		V <sub>R</sub> = 10 V, f = 1 MHz		0.22	0.6	
Reverse parallel resistance	R <sub>P</sub>	V <sub>R</sub> = 1 V, f = 100 MHz	50			K Ω
		V <sub>R</sub> = 0 V, f = 1 GHz	10			
Forward resistance	r <sub>f</sub>	I <sub>F</sub> = 1.5 mA, f = 100 MHz	22	40		Ω
		I <sub>F</sub> = 10 mA, f = 100 MHz	4.5	7		
Charge carrier life time	τ <sub>rr</sub>	I <sub>F</sub> = 10 mA, I <sub>R</sub> = 6 mA, measured at I <sub>R</sub> = 3 mA, R <sub>L</sub> = 100 Ω		1600		ns
I-region width	W <sub>I</sub>			130		μ m

### ■ Marking

Marking	R
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