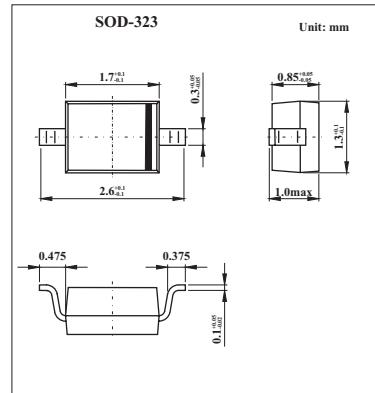


**Band-switching diode****BA591****■ Features**

- Very small plastic SMD package
- Low diode capacitance: max. 1.05 pF
- Low diode forward resistance: max. 0.7 Ω
- Small inductance.

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

Parameter	Symbol	Conditions	Min	Max	Unit
Continuous reverse voltage	V <sub>R</sub>			30	V
Continuous forward current	I <sub>F</sub>			100	mA
Total power dissipation	P <sub>tot</sub>	T <sub>s</sub> = 90°C		500	mW
Storage temperature	T <sub>stg</sub>		-65	+150	°C
Junction temperature	T <sub>j</sub>		-65	+150	°C
thermal resistance from junction to soldering point	R <sub>th j-s</sub>			120	K/W

**■ Electrical Characteristics Ta = 25 °C**

Parameter	Symbol	Conditions	Typ	Max	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 10 mA		1	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 20 V		20	nA
Diode capacitance	C <sub>d</sub>	f = 1 MHz; note 1 V <sub>R</sub> = 1 V V <sub>R</sub> = 3 V	0.8 0.65	1.05 0.9	pF pF
Diode forward resistance	r <sub>D</sub>	f = 100 MHz; note 1 I <sub>F</sub> = 3 mA I <sub>F</sub> = 10 mA	0.45 0.36	0.7 0.5	Ω Ω
Reverse resistance	1/g <sub>P</sub>	V <sub>R</sub> = 1 V; f = 100 MHz	100		K Ω
Series inductance	L <sub>s</sub>		2		nH

Note

1. Guaranteed on AQL basis; inspection level S4, AQL 1.0.

**■ Marking**

Marking	A1
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