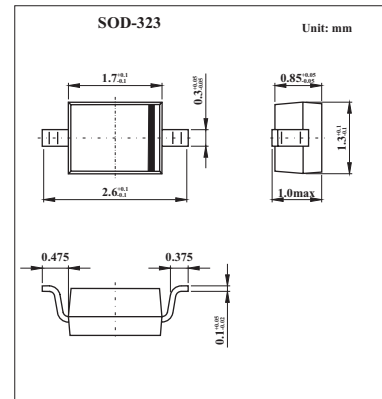


## SILICON SWITCHING DIODE

### BAS140WS

#### ■ Features

- General purpose diodes for high-speed switching
- Circuit protection
- Voltage clamping
- High-level detecting and mixing



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

Parameter	Symbol	Value	Unit
Reverse voltage	V <sub>R</sub>	40	V
Forward current	I <sub>F</sub>	120	mA
Surge forward current	I <sub>FSM</sub>	200	mA
Total power dissipation	P <sub>tot</sub>	250	mW
Operating temperature range	T <sub>op</sub>	-55 to+125	°C
Storage Temperature range	T <sub>stg</sub>	-65 to+150	°C
Junction ambient <sup>(1)</sup>	R <sub>thJA</sub>	≤ 260	K/W
Junction- soldering point	R <sub>thJS</sub>	≤ 150	K/W

Note:

1.Package mounted on an epoxy pcb 40 mm × 40 mm × 15 mm/1cm<sup>2</sup> Cu.

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

Parameter	Symbol	Min	Typ	Max	Unit
Breakdown voltage	V <sub>(BR)</sub>	40			V
Forward voltage	V <sub>F</sub>				mV
I <sub>F</sub> = 1 mA		250	310	380	
I <sub>F</sub> = 10 mA		350	450	500	
I <sub>F</sub> = 15 mA		600	720	1000	
Reverse current	I <sub>R</sub>				μA
V <sub>R</sub> = 30 V				1	
V <sub>R</sub> = 40 V				10	
Diode capacitance	C <sub>T</sub>		3	5	pF
Differential forward resistance	R <sub>F</sub>		10		Ω
Series inductance	L <sub>s</sub>		2		nH

#### ■ Marking

Marking	4
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