

# BAT41CS

## Surface Mount Schottky Diodes

**Voltage**

**100 V**

**Current**

**200 mA**

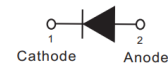
### Features

- Extremely high switching speed
- Surface mount package ideally suited for automatic insertion
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case : SOD-323 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0041 grams

### SOD-323



## Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	0.2	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	1	A
Typical Thermal Resistance <sup>(Note 1)</sup>	R <sub>θJA</sub>	650	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55~150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C

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## Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

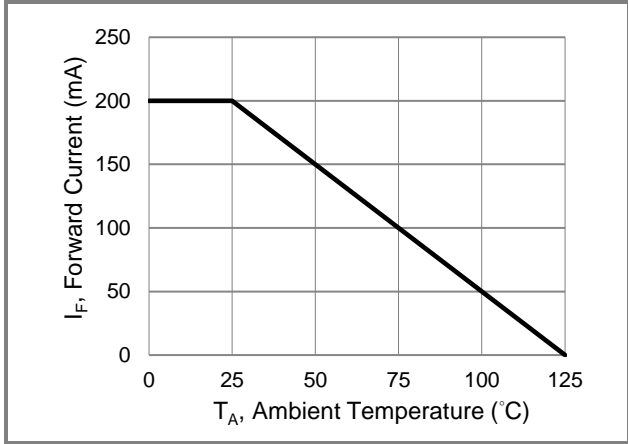
PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> = 50 uA, T <sub>J</sub> = 25 °C	100	-	-	V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 1 mA, T <sub>J</sub> = 25 °C	-	-	0.45	V
		I <sub>F</sub> = 200 mA, T <sub>J</sub> = 25 °C	-	-	1	
Reverse Current <sup>(Note 2)</sup>	I <sub>R</sub>	V <sub>R</sub> = 50 V, T <sub>J</sub> = 25 °C	-	-	0.1	uA
		V <sub>R</sub> = 50 V, T <sub>J</sub> = 100 °C	-	-	20	
Typical Junction Capacitance	C <sub>J</sub>	1Vdc Bias f = 1 MHz	-	3	10	pF

NOTES :

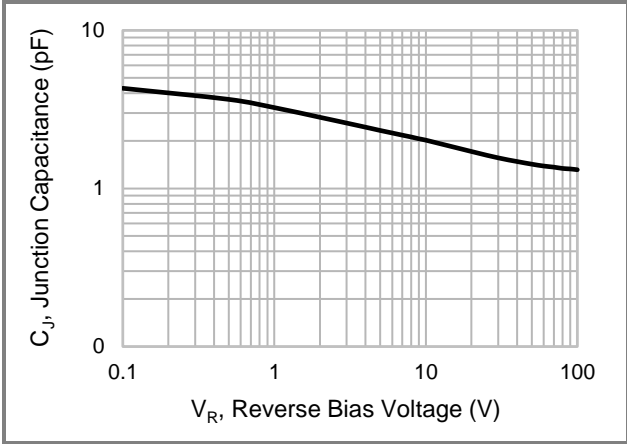
1. Mounted on a FR4 PCB, single-sided copper, standard footprint.
2. Short duration pulse test used to minimize self-heating effect.

# BAT41CS

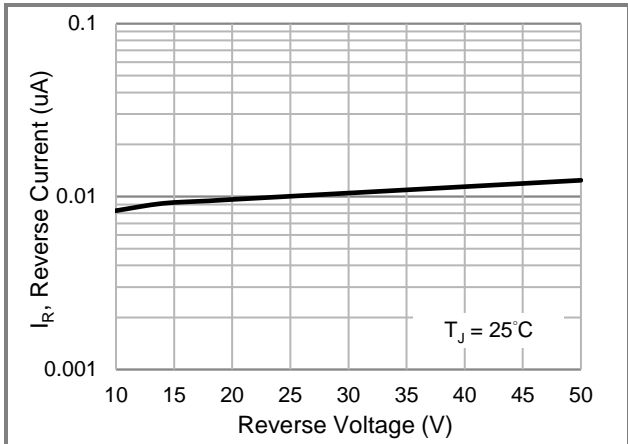
## TYPICAL CHARACTERISTIC CURVES



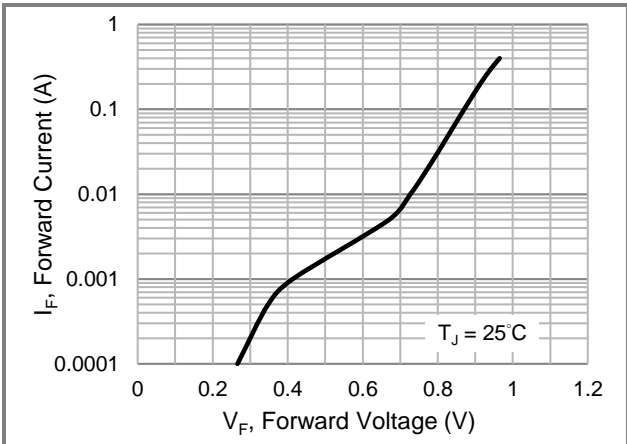
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



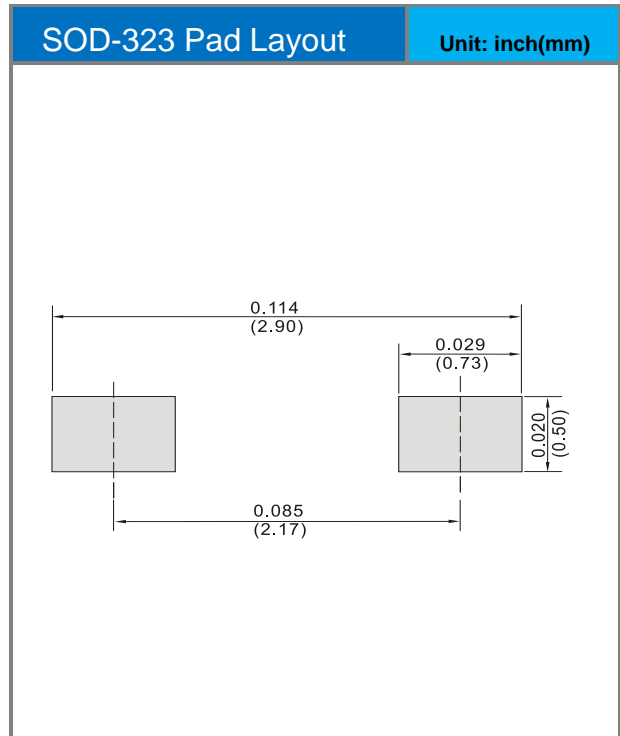
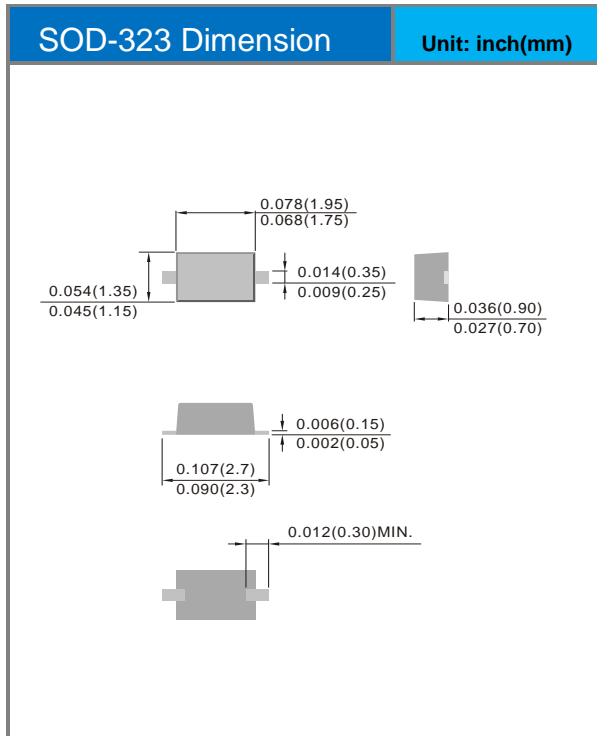
**Fig.4 Typical Forward Characteristics**

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## Product and Packing Information

Part No.	Package Type	Packing Type	Marking
BAT41CS	SOD-323	5K pcs / 7" reel	AAA

## Packaging Information & Mounting Pad Layout



## BAT41CS

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