Small Signal Switching Diode, Dual

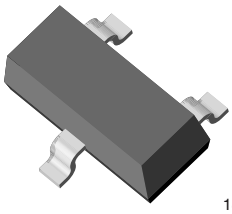
Features

- Silicon epitaxial planar diode
- Fast switching dual diode with common cathode
- These diodes are also available as single diodes in the same case style of SOT-23 case with type designation of BAS21-V, in the SOD-123 case with the type designation of BAV21W-V, and in the SOD-323 case with the type designation of BAV21WS-V
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Pb-free

e3

RoHS COMPLIANT



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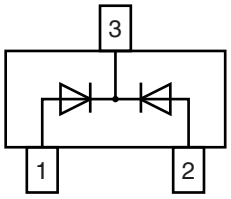


Mechanical Data

Case: SOT-23

Weight: approx. 8.8 mg

Packaging codes/options:

GS18/10K per 13" reel (8 mm tape), 10K/box

GS08/3K per 7" reel (8 mm tape), 15K/box

Parts Table

Part	Ordering code	Marking	Remarks
BAV23C-V	BAV23C-V-GS18 or BAV23C-V-GS08	KT6	Tape and reel

Absolute Maximum Ratings

T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Continuous reverse voltage		V_R	200	V
Repetitive peak reverse voltage		V_{RRM}	250	V
Non-repetitive peak forward current	t = 1 µs	I_{FSM}	9	A
Non-repetitive peak forward surge current	t = 1 s	I_{FSM}	0.5	A
Maximum average forward rectified current		$I_{F(AV)}$	200 [1]	mA
Forward continuous current		I_F	400 [2]	mA
Repetitive peak forward current		I_{FRM}	625	mA
Power dissipation		P_{tot}	350 [2]	mW

Notes:

[1] Measured under pulse conditions; pulse time = $t_p \leq 0.3$ ms

[2] Device on fiberglass substrate

Thermal Characteristics

T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air		R_{thJA}	357 [1]	K/W
Junction temperature		T_j	150	°C
Storage temperature range		$T_j = T_{stg}$	- 65 to + 150	°C

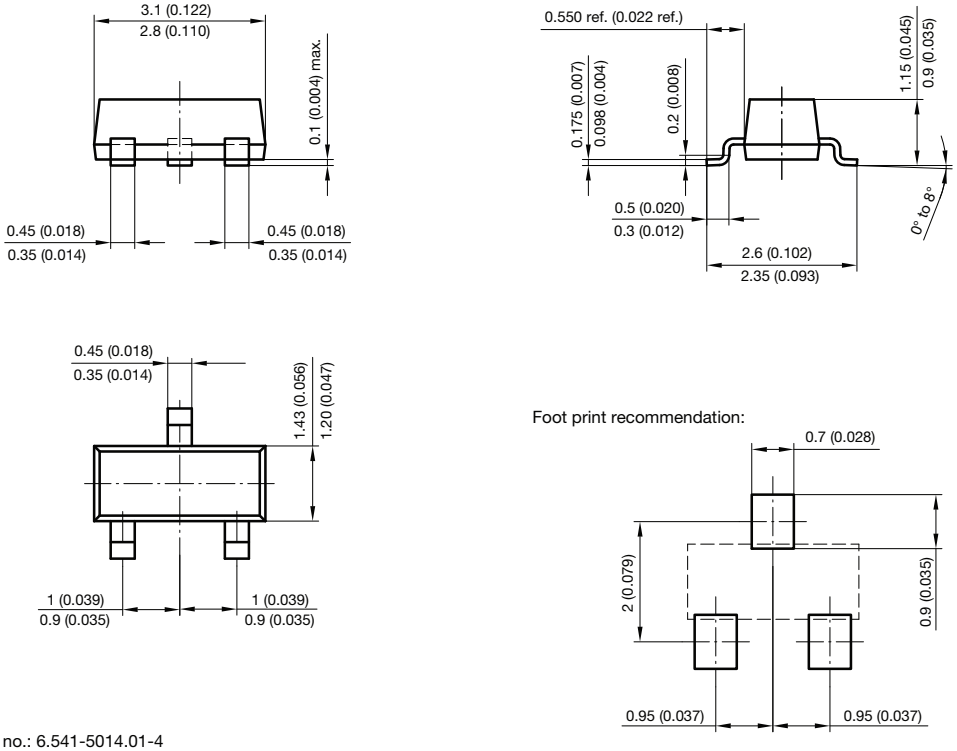
Note:
[1] Device on fiberglass substrate

Electrical Characteristics

T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	I_R = 100 µA, t_p = 300 µs	$V_{(BR)}$	250			V
Forward voltage	I_F = 100 mA	V_F			1000	mV
	I_F = 200 mA	V_F			1250	mV
Reverse current	V_R = 200 V	I_R			100	nA
	V_R = 200 V, T_j = 150 °C	I_R			100	µA
Dynamic forward resistance	I_F = 10 mA	r_f		5		Ω
Diode capacitance	V_R = 0, f = 1 MHz	C_D			5	pF
Reverse recovery time	$I_F = I_R$ = 30 mA, R_L = 100 Ω i_R = 3 mA	t_{rr}			50	ns

Package Dimensions in millimeters (inches): SOT-23



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