

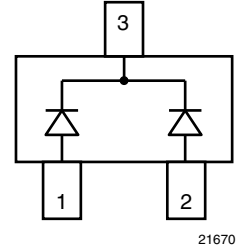
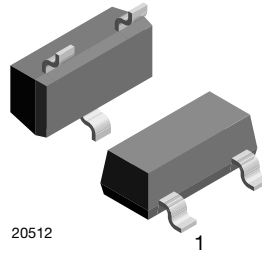
## Small Signal Switching Diode, Dual

### Features

- Silicon epitaxial planar diode
- Fast switching dual diode with common cathode
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC



**RoHS**  
COMPLIANT  
**GREEN**  
(5-2008)\*\*



### Mechanical Data

**Case:** SOT-23

**Weight:** approx. 8.1 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-G	BAV23C-V-G-18 or BAV23C-V-G-08	KT7	Tape and reel

### Absolute Maximum Ratings

T<sub>amb</sub> = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Continuous reverse voltage		V <sub>R</sub>	200	V
Repetitive peak reverse voltage		V <sub>RRM</sub>	250	V
Non-repetitive peak forward current	t = 1 μs	I <sub>FSM</sub>	9.0	A
Non-repetitive peak forward surge current	t = 1 s	I <sub>FSM</sub>	0.5	A
Maximum average forward rectified current	Measured under pulse conditions; pulse time = t <sub>p</sub> ≤ 0.3 ms	I <sub>F(AV)</sub>	200	mA
Forward continuous current	Device on fiberglass substrate	I <sub>F</sub>	400	mA
Repetitive peak forward current		I <sub>FRM</sub>	625	mA
Power dissipation	Device on fiberglass substrate	P <sub>tot</sub>	350	mW

\*\* Please see document "Vishay Material Category Policy" [www.vishay.com/doc?99902](http://www.vishay.com/doc?99902)

### Thermal Characteristics

$T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified

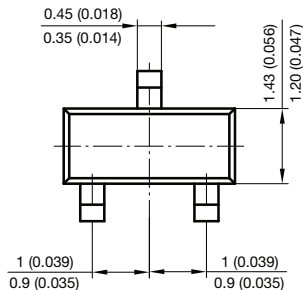
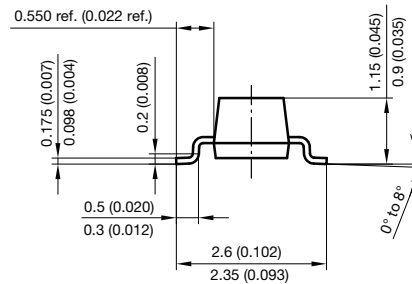
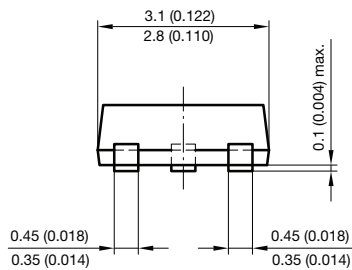
Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air	Device on fiberglass substrate	$R_{thJA}$	357	K/W
Junction temperature		$T_j$	150	$^{\circ}\text{C}$
Storage temperature range		$T_j = T_{stg}$	- 65 to + 150	$^{\circ}\text{C}$

### Electrical Characteristics

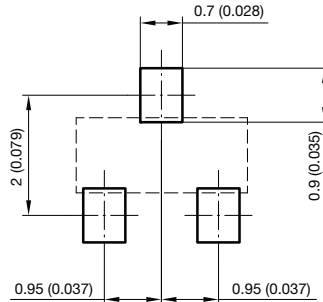
$T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified

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

### Package Dimensions in millimeters (inches): SOT-23



Foot print recommendation:



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