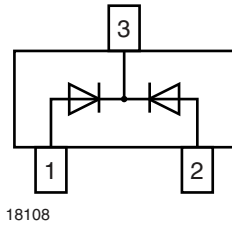




Small Signal Switching Diode, Dual



FEATURES

- Silicon Epitaxial Planar Diode
- Fast switching dual diode with common cathode
- AEC-Q101 qualified
- Base P/N-G3 - green, commercial grade
- Material categorization:
For definitions of compliance please see www.vishay.com/doc?99912



MECHANICAL DATA

Case: SOT-23

Weight: approx. 8.1 mg

Packaging codes/options:

18/10K per 13" reel (8 mm tape), 10K/box

08/3K per 7" reel (8 mm tape), 15K/box

PARTS TABLE				
PART	ORDERING CODE	INTERNAL CONSTRUCTION	TYPE MARKING	REMARKS
BAV70-G	BAV70-G3-08 or BAV70-G3-18	Dual diodes common cathode	JJG	Tape and reel

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Peak reverse voltage		V _{RRM}	70	V
Reverse voltage		V _R	70	V
Forward current (continuous)		I _F	250	mA
Non repetitive peak forward current	t _p = 1 μs	I _{FSM}	2	A
	t _p = 1 ms	I _{FSM}	1	A
	t _p = 1 s	I _{FSM}	0.5	A
Power dissipation ⁽¹⁾		P _{tot}	350	mW

Note

⁽¹⁾ 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 ⁽¹⁾		R _{thJA}	430	K/W
Junction temperature		T _j	150	°C
Storage temperature range		T _{stg}	- 65 to + 150	°C
Operating temperature range		T _{op}	- 55 to + 150	°C

Note

⁽¹⁾ Device on fiberglass substrate

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 1\text{ mA}$	V_F			0.715	V
	$I_F = 10\text{ mA}$	V_F			0.855	V
	$I_F = 50\text{ mA}$	V_F			1	V
	$I_F = 150\text{ mA}$	V_F			1.25	V
Reverse current	$V_R = 70\text{ V}$	I_R			2500	nA
	$V_R = 70\text{ V}, T_J = 150\text{ }^{\circ}\text{C}$	I_R			50	μA
	$V_R = 25\text{ V}, T_J = 150\text{ }^{\circ}\text{C}$	I_R			30	μA
Diode capacitance	$V_R = 0\text{ V}, f = 1\text{ MHz}$	C_D			1.5	pF
Reverse recovery time	$I_F = 10\text{ mA}$ to $i_R = 1\text{ mA}$, $V_R = 6\text{ V}, R_L = 100\text{ }\Omega$	t_{rr}			6	ns

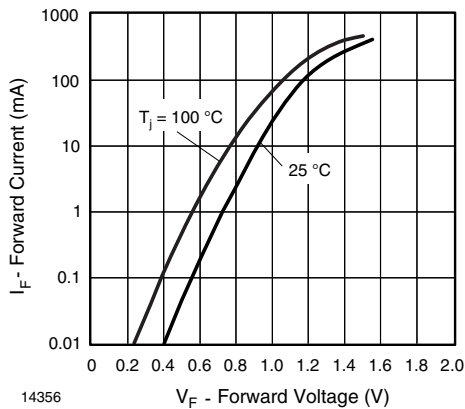
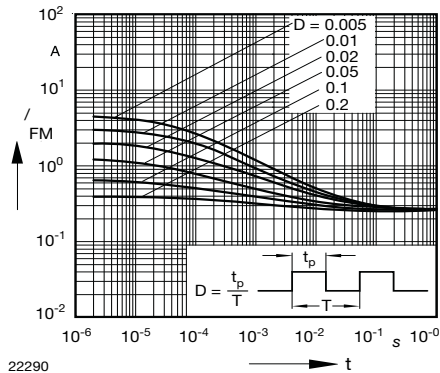
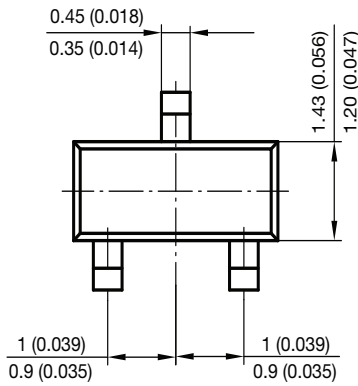
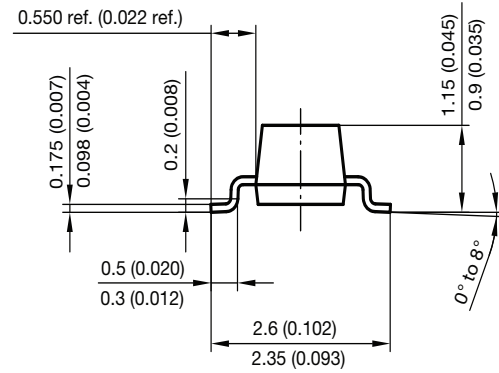
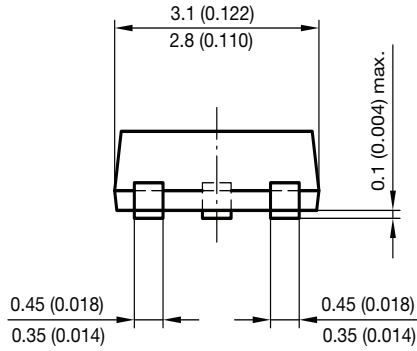
TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)


Fig. 1 - Forward Current vs. Forward Voltage

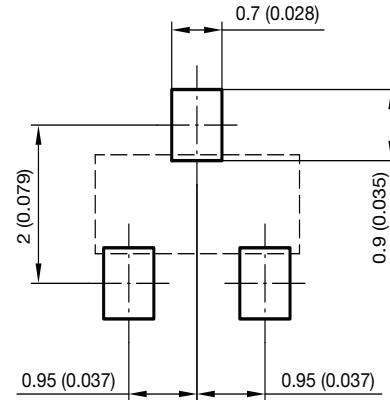

 Fig. 2 - Peak forward current $I_{FM} = f(t_p)$



PACKAGE DIMENSIONS in millimeters (inches): **SOT-23**



Foot print recommendation:



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Rev. 8 - Date: 23.Sept.2009
17418



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Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9