

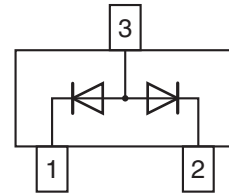
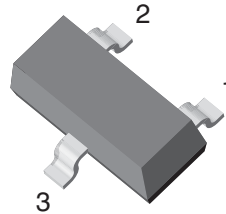
Small Signal Switching Diode, Dual

Features

- Silicon Epitaxial Planar Diode
- Fast switching dual diode with common anode
- AEC-Q101 qualified
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



RoHS
COMPLIANT
GREEN
(5-2008)**



17033

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	Type Marking	Remarks
BAW56-V-G	BAW56-V-G-18 or BAW56-V-G-08	JDG	Tape and reel

Absolute Maximum Ratings

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

Parameter	Test Condition	Symbol	Value	Unit
Repetitive peak reverse voltage = Working peak reverse voltage = DC Blocking voltage		$V_R = V_{RRM}$	70	V
Forward continuous current		I_F	250	mA
Non repetitive peak forward current	$t_p = 1\ \mu\text{s}$	I_{FSM}	2	A
	$t_p = 1\ \text{ms}$	I_{FSM}	1	A
	$t_p = 1\ \text{s}$	I_{FSM}	0.5	A
Power dissipation		P_{tot}	350 ¹⁾	mW

¹⁾ Device on fiberglass substrate

Thermal Characteristics

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

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air		R_{thJA}	430	K/W
Junction temperature		T_j	150	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	- 65 to + 150	$^{\circ}\text{C}$

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			715	mV
	$I_F = 10\text{ mA}$	V_F			855	mV
	$I_F = 50\text{ mA}$	V_F			1000	mV
	$I_F = 150\text{ mA}$	V_F			1250	mV
Reverse current	$V_R = 70\text{ V}$	I_R			2.5	μA
	$V_R = 70\text{ V}, T_j = 150\text{ }^{\circ}\text{C}$	I_R			100	μA
	$V_R = 25\text{ V}, T_j = 150\text{ }^{\circ}\text{C}$	I_R			30	μA
Diode capacitance	$V_F = V_R = 0, f = 1\text{ MHz}$	C_D			2	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

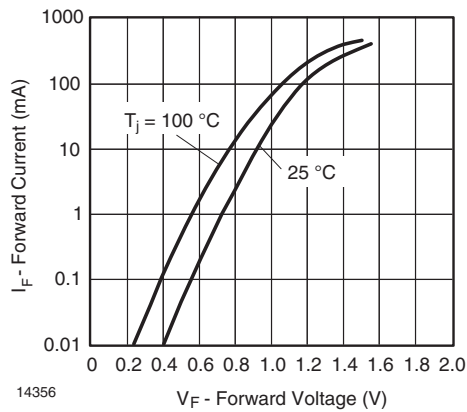


Figure 1. Forward Current vs. Forward Voltage

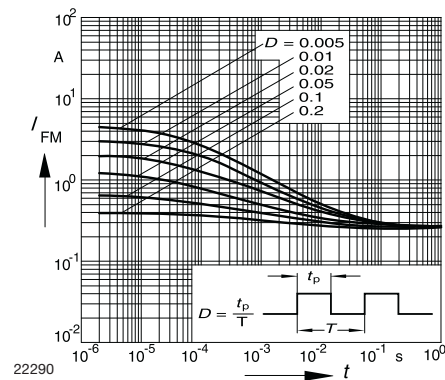
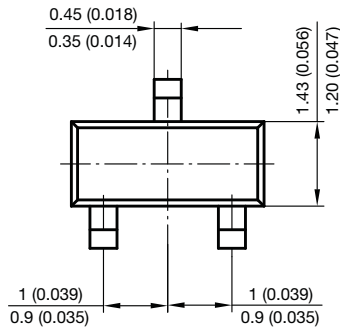
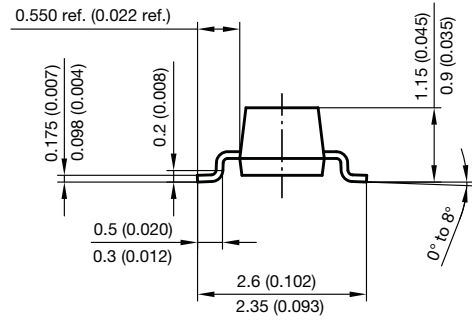
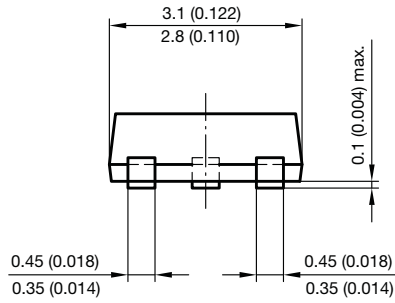
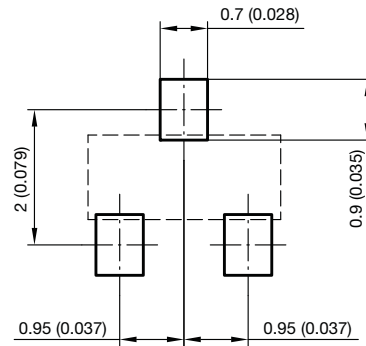


Figure 2. Peak forward current $I_{FM} = f(t_p)$

Package Dimensions in millimeters (inches): SOT-23



Foot print recommendation:



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