

# **Dual Switching Diode in SOT-23**

#### **Features**

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance





### **Mechanical Data**

■ Case: SOT-23 (plastic package). Lead free; RoHS compliant

■ Molding Compound Flammability Rating:

UL 94 V-0

■ Terminals: High temperature soldering guaranteed:

260 °C/10 sec. at terminals

### **Applications**

- Single Switch
- Polarity Protection

### **Absolute Maximum Ratings**

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Limit	Unit
Reverse Voltage	V <sub>R</sub>	75	V
Forward Current	I <sub>F</sub>	250	mA
Peak Forward Surge Current @t=1 s	I <sub>FSM</sub>	1.0	А
Power Dissipation	P <sub>D</sub>	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C/W
Junction Temperature	TJ	150	℃
Storage Temperature range	T <sub>STG</sub>	-55~+150	°C

### **Electrical Characteristics**

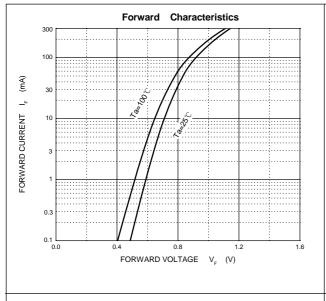
(T<sub>A</sub> = 25 °C unless otherwise specified)

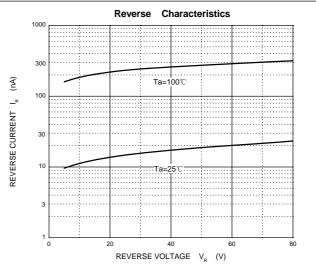
Parameter	Symbol	Min	Тур	Max	Unit	Conditions
Reverse breakdown voltage	V <sub>R</sub>	75			V	I <sub>R</sub> =100μA
	V <sub>F1</sub>			0.715	V	I <sub>F</sub> =1mA
Forward voltage	V <sub>F2</sub>			0.855	V	I <sub>F</sub> =10mA
	V <sub>F3</sub>			1	V	I <sub>F</sub> =50mA
	$V_{F4}$			1.25	V	I <sub>F</sub> =150mA
Reverse current	I <sub>R</sub>			2.5	μΑ	V <sub>R</sub> =75V
Capacitance between terminals	Ст			2.0	pF	V <sub>R</sub> =0,f=1MHz
Payerse receivery time	4			6	ns	I <sub>F</sub> = 10mA,
Reverse recovery time	t <sub>rr</sub>					$V_R = 0 \text{ V}, R_L = 500\Omega$

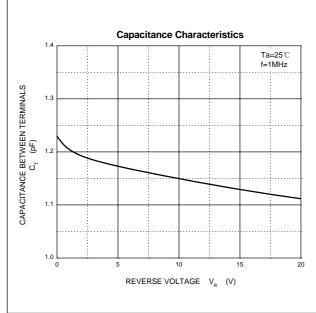
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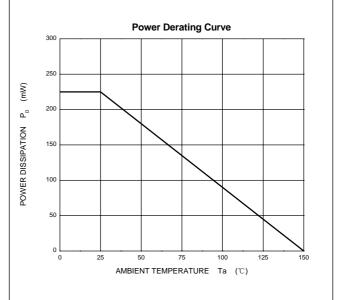


## Typical Characteristics (T<sub>amb</sub> = 25 °C unless otherwise specified)





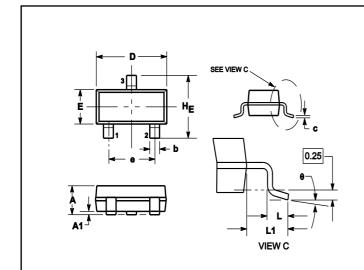




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# **Package Dimensions**



	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
Α	0.89	1	1.11	0.035	0.04	0.044
A1	0.01	0.06	0.1	0.001	0.002	0.004
b	0.37	0.44	0.5	0.015	0.018	0.02
С	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.9	3.04	0.11	0.114	0.12
Е	1.20	1.3	1.4	0.047	0.051	0.055
е	1.78	1.9	2.04	0.07	0.075	0.081
L	0.10	0.2	0.3	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
H <sub>E</sub>	2.10	2.4	2.64	0.083	0.094	0.104
θ	0°		10°	0°		10°

# **Ordering information**

Order code	Package	Marking	Packaging option	Base quantity	Packaging specification
BAW56	SOT-23	A1	Tape and reel	3000pcs / reel	EIA STD RS-481

# **Revision history**

Date	Revision	Changes
23-May-2012	1.0	Initial release

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