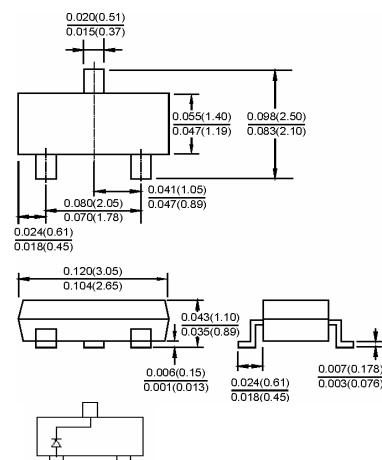


### SOT-23



Dimensions in inches and (millimeters)

### Applications

- ✧ High speed switching application.

### Ordering Information

Type No.	Marking	Package Code
BAW56	A1	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Non-repetitive peak reverse voltage	V <sub>RM</sub>	100	V
Peak Repetitive Reverse Voltage Working peak reverse voltage DC Reverse Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	75	V
Forward Continuous Current	I <sub>F</sub>	300	mA
Non-repetitive forward Surge Current @t=1.0ms @t=1.0s	I <sub>FSM</sub>	2.0 1.0	A
Power Dissipation	P <sub>D</sub>	350	mW
Thermal resistance junction to ambient air	R <sub>θJA</sub>	357	°C/W
Operating Junction Temperature Range	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

**ELECTRICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified**

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	$I_R = 2.5\mu\text{A}$
Forward Voltage	$V_F$	-	715 855 1000 1250	mV	$I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$
Reverse Leakage Current	$I_R$	-	2.5 25	$\mu\text{A}$ nA	$V_R = 75\text{V}$ $V_R = 20\text{V}$
Diode Capacitance	$C_D$	-	2	pF	$V_R = 0\text{V}, f = 1\text{MHz}$
Reverse Recovery Time	$t_{rr}$	-	4	ns	$I_F = I_R = 10\text{mA}$ , $I_{rr} = 0.1 * I_R, R_L = 100\Omega$

**TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified**
