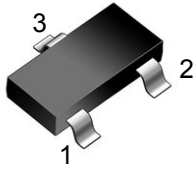


**SOT-23**

**Features**

Fast Switching Device (TRR <6nS)  
 High Stability and High Reliability  
 Low reverse leakage  
 Halogen free and RoHS compliant

**Mechanical Data**

SOT-23 Small Outline Plastic Package  
 EpoxyUL: 94V-0

**MARKING:**

BAW56	BAV70	BAV99
MARKING:A1	MARKING:A4	MARKING:A7

**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel,7" reel	3000	EIA-481-1

**Maximum Ratings & Thermal Characteristics**

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Reverse Voltage	VR	70	V
Average Rectified Current	IO	200	mA
Non-repetitive Peak Forward Current	IFM	400	mA
Peak Forward Surge Current@tp=1ms; TA=25°C	IFSM	2.0	A
Power Dissipation	Pd	225	mW
Operating junction temperature	Tj	150	°C
Storage temperature range	Ts	-65--+150	°C
Typical thermal resistance	RθJA	500	°C/W

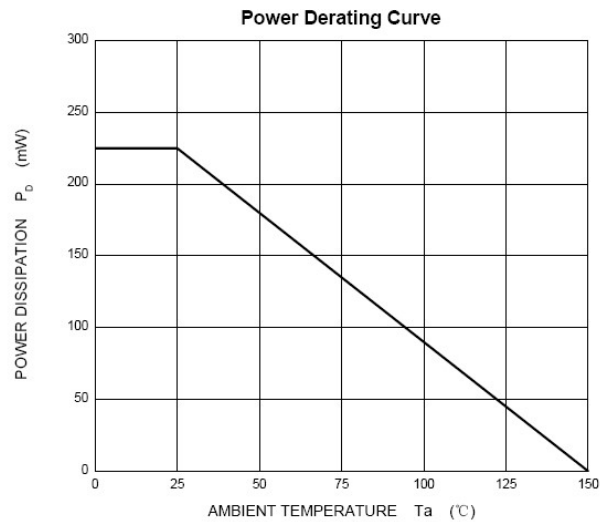
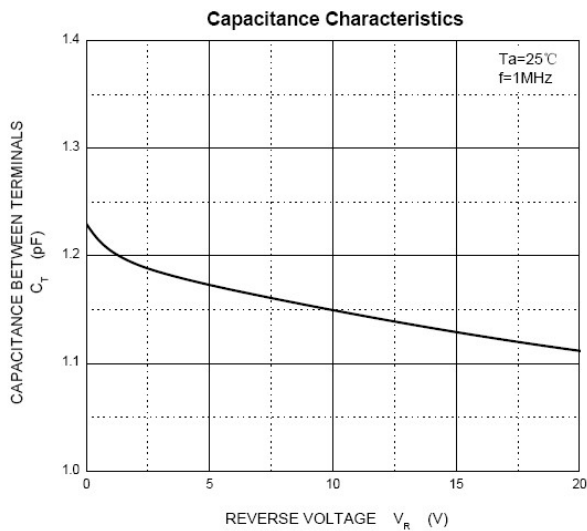
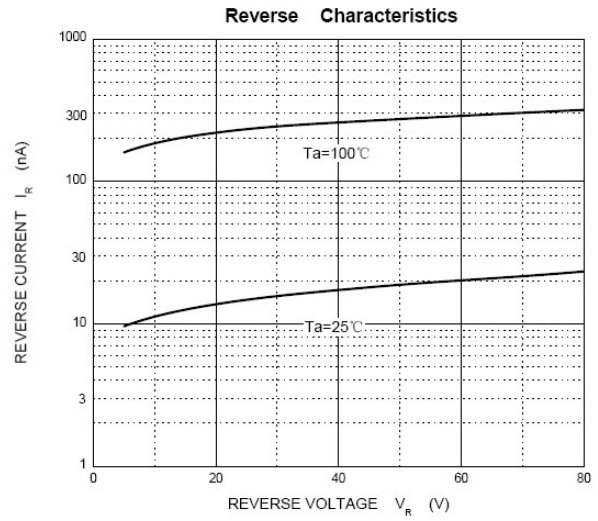
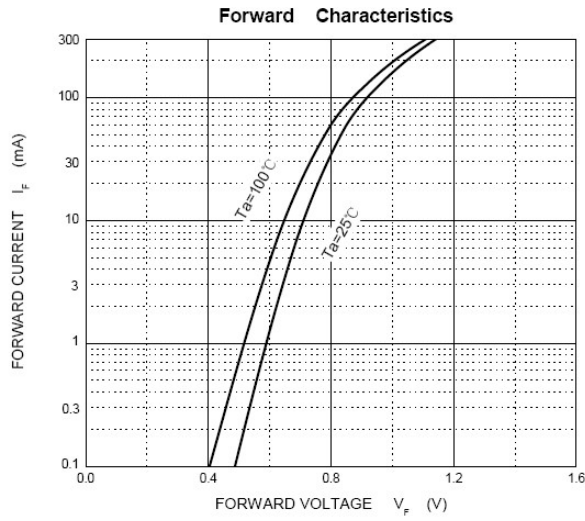
Valid provided that electrodes are kept at ambient temperature.

**Electrical Characteristics**

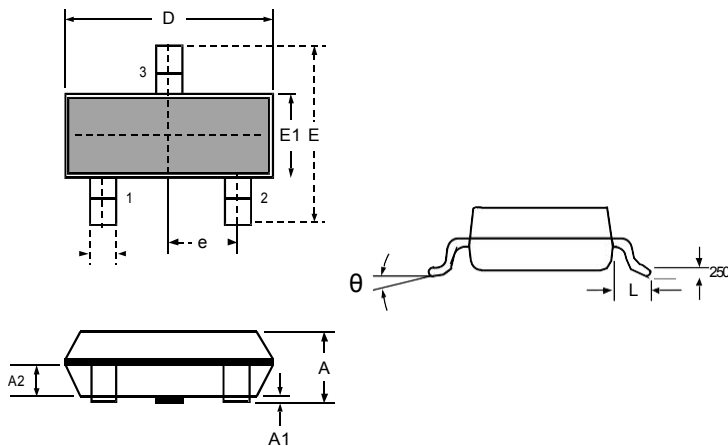
(Ratings at 25°C ambient temperature unless otherwise specified).

Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
V(BR)	Reverse Voltage	IR=100uA	250		V
IR	Reverse Leakage Current	VR=200V	---	0.1	uA
VF	Forward Voltage	IF=100mA	---	1.00	V
		IF=200mA	---	1.25	
TRR	Reverse Recovery Time	IF= IR=30mA	---	50	nS
		RL=100Ω			
		IRR=0.1 X IR			
CT	Capacitance	VR=0V, f=1MHZ	---	5	pF

## Ratings and Characteristic Curves



## Package Outline Dimensions: SOT-23



**DIMENSIONS**

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.300	0.500	0.012	0.020
$\theta$	0	$8^\circ$	0	$8^\circ$