

# MSKSEMI

SEMICONDUCTOR



ESD



TVS



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MOV



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PLED

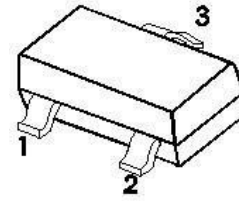
Product data sheet

**Features**




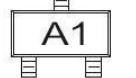


- PD:225mW
- High Stability and High Reliability
- Low reverse leakage

**Mechanical Data**

- PKG: SOT-23
- Epoxy UL: 94V-0
- Mounting Position: Any



SOT-23

<b>BAW56-MS</b>	<b>BAV70-MS</b>	<b>BAV99-MS</b>
		
<b>MARKING:A1</b>	<b>MARKING:A4</b>	<b>MARKING:A7</b>
		

**Maximum Ratings & Thermal Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified.)

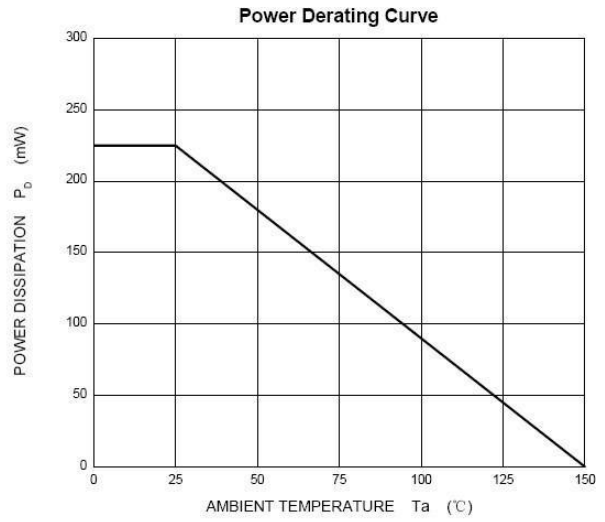
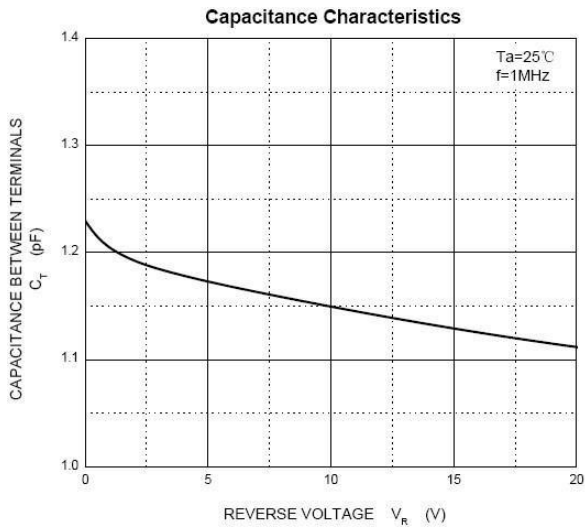
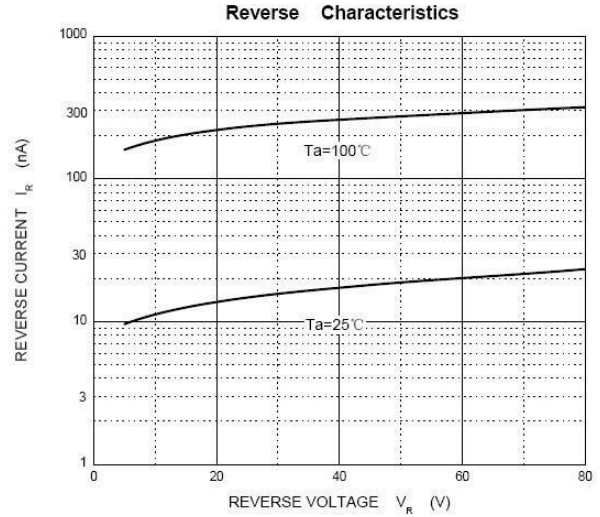
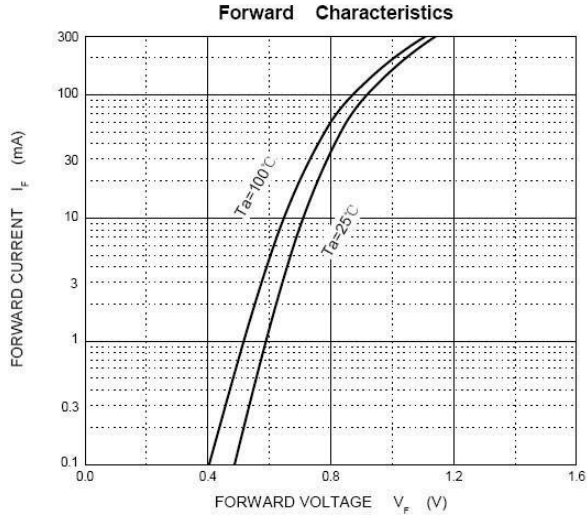
Parameters	Symbol	Value	Unit
Reverse Voltage	VR	70	V
Power Dissipation	Pd	225	mW
Operating junction temperature	Tj	150	°C
Storage temperature range	Ts	-65-+150	°C
Average Rectified Current	IO	200	mA
Non-repetitive Peak Forward Current	IFM	400	mA
Peak Forward Surge Current @tp=1ms; TA=25°C	IFSM	2.0	A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

Valid provided that electrodes are kept at ambient temperature.

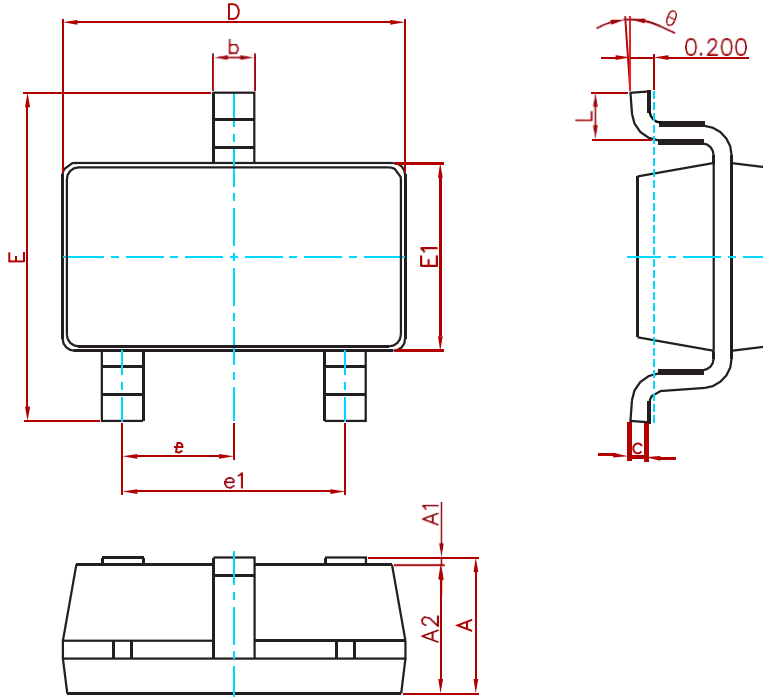
**Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified).

Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
VRB	Reverse Voltage	IB=100uA	70	---	V
IR	Reverse Leakage Current	VR=70V	---	2.5	uA
VF	Forward Voltage	IF=1mA	---	0.715	V
		IF=10mA	---	0.855	
		IF=50mA	---	1.00	
		IF=150mA	---	1.25	
TRR	Reverse Recovery Time	IF= IR=10mA,RL=100Ω IRR=0.1xIR	---	6	nS
CT	Capacitance	VR=0V, f=1MHZ	---	1.5	pF

Typical Characteristics

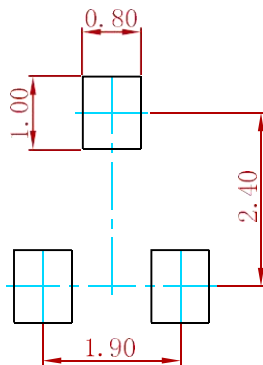


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E1	1.500	1.700	0.059	0.067
E	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°

**Suggested Pad Layout**



Note:  
 1. Controlling dimension: in millimeters.  
 2. General tolerance: ± 0.05mm.  
 3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
BAW56-MS/BAV70-MS/BAV99-MS	SOT-23	3000

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