



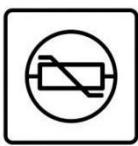
ESD



TVS



TSS



MOV



GDT



PLED

BAT54W-MS

Product specification

Features

- Low Forward Voltage Drop
- Fast Switching
- Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version

Reference News

PACKAGE OUTLINE	PIN Configuration	MARKING
 SOD-123		

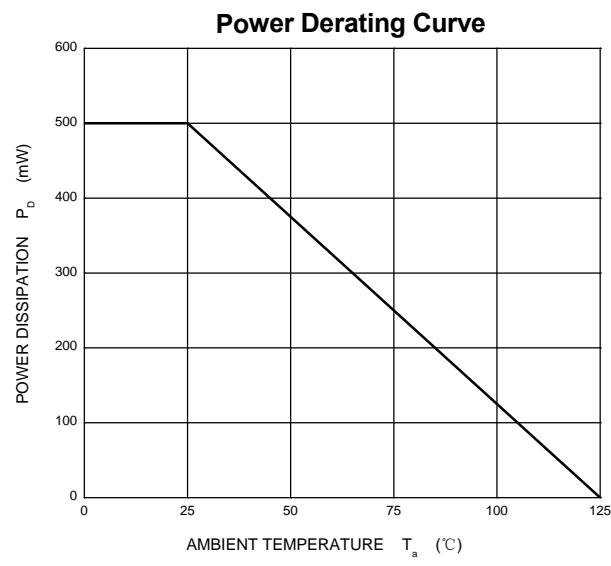
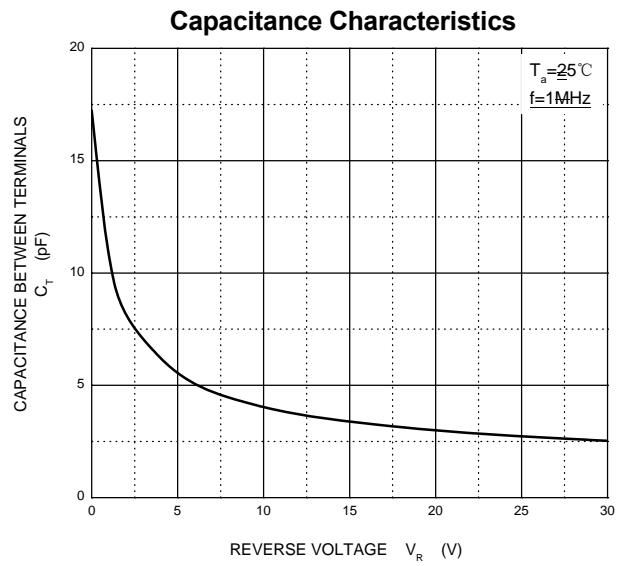
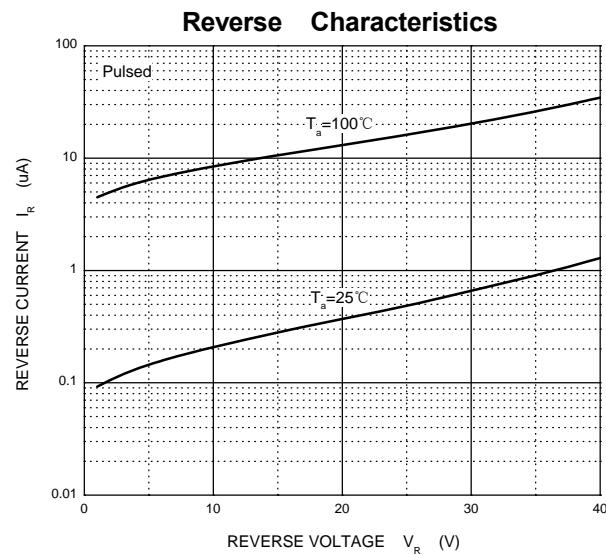
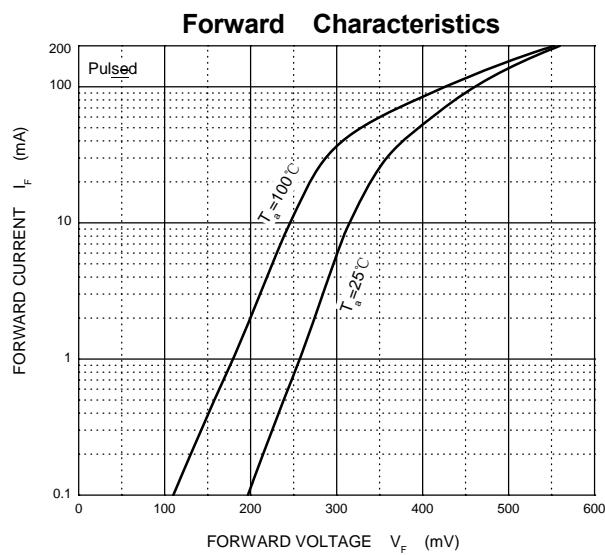
Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
DC blocking voltage	V _R	30	V
RMS reverse voltage	V _{R(RMS)}	21	
Average rectified output current	I _o	100	mA
Forward continuous current	I _F	200	mA
Repetitive peak forward current	I _{FRM}	300	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	600	mA
Power dissipation	P _d	500	mW
Thermal resistance junction to ambient	R _{θ JA}	200	°C/W
Junction temperature	T _J	125	°C
Storage temperature range	T _{STG}	-55~+150	°C

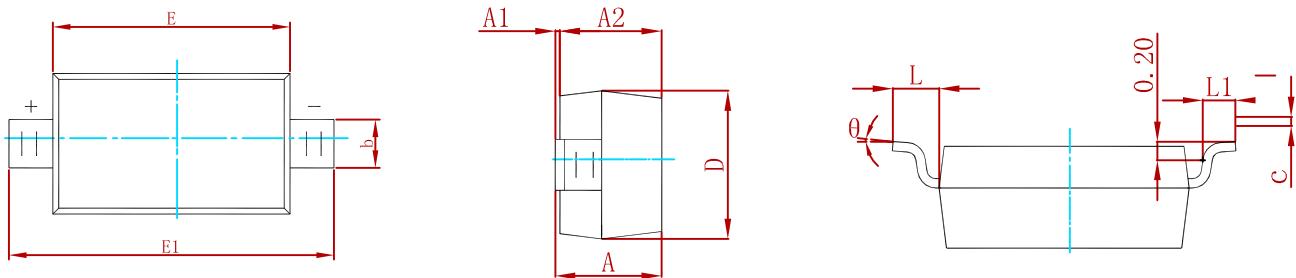
Electrical Characteristics @Ta=25°C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V _(BR)	I _R =100μA	30			V
Forward voltage	V _{F1}	I _F =0.1mA			240	mV
	V _{F2}	I _F =1.0mA			320	mV
	V _{F3}	I _F =10mA			400	mV
	V _{F4}	I _F =30mA			500	mV
	V _{F5}	I _F =100mA			1000	mV
Reverse current	I _R	V _R =25V			2.0	uA
Reverse recovery time	t _{rr}	I _F =10mA, I _R =10mA to 1mA, R _L =100 Ω			5.0	ns
Capacitance between terminals	C _T	V _R =1V, f=1MHz			10	pF

Typical Characteristics

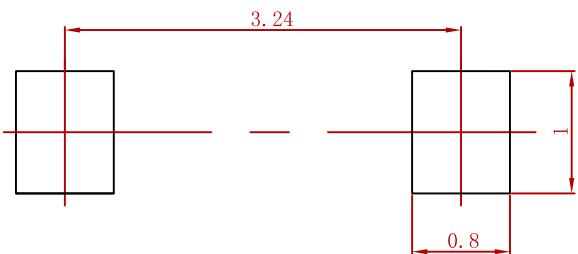


PACKAGE MECHANICAL DATA



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	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:

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

REELSPECIFICATION

P/N	PKG	QTY
BAT54W-MS	SOD-123	3000

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