

SOT -23 Plastic-Encapsulate Schottky Barrier Diode

Features

- High Current Capability
- Low Forward Voltage Drop
- Extremely Fast Switching Speed

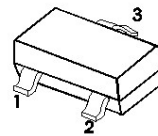


SOT-23

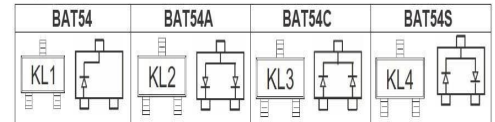
Mechanical Data

- SOD-23 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any

Pin definition



Equivalent circuit



Maximum Ratings & Thermal Characteristic (T_A=25°C unless otherwise noted)

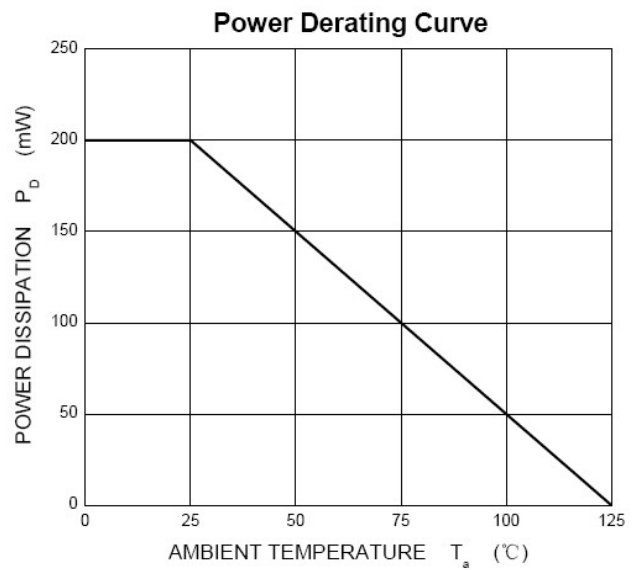
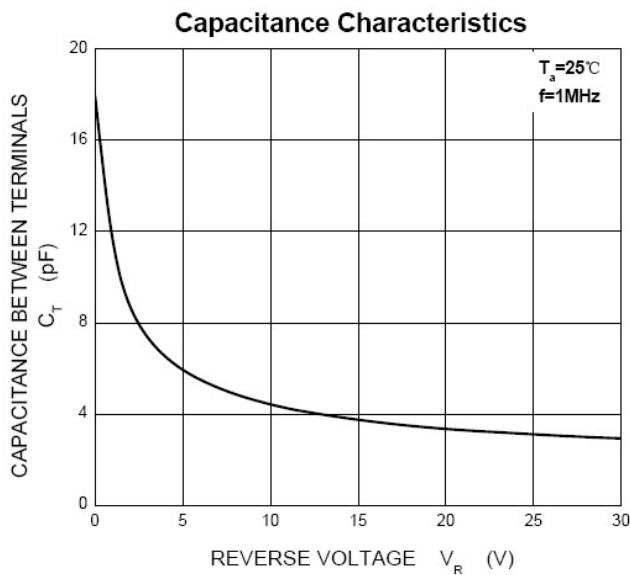
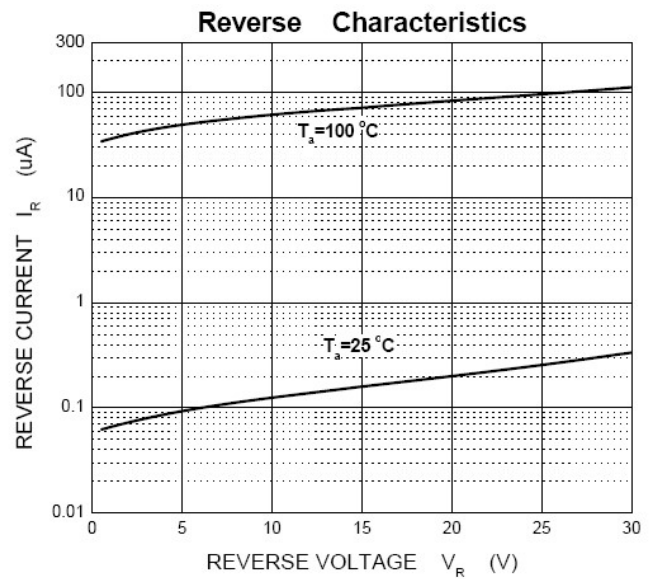
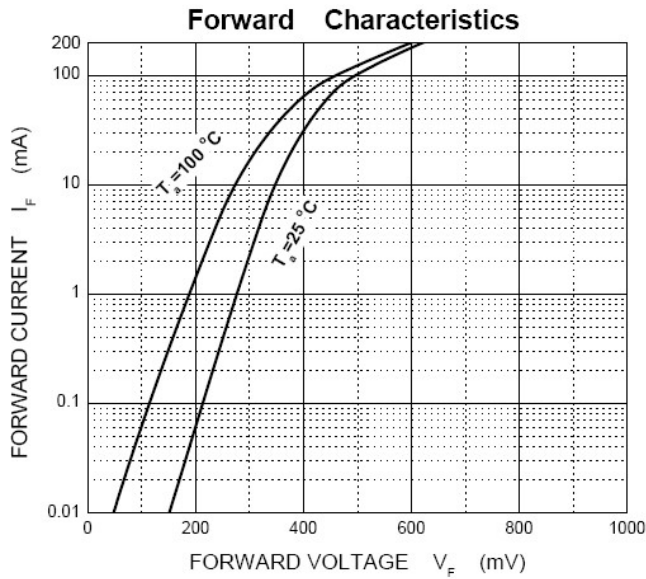
Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	30	V
Maximum RMS voltage	V _{RMS}	21	V
Maximum DC blocking voltage	V _{DC}	30	V
Typical thermal resistance	R _{θJA}	500	°C/W
Junction Temperature	T _J	125	°C
Storage temperature range	T _{STG}	-55-+150	°C
Power Dissipation	P _D	200	mW
Non-repetitive Peak Forward Current	I _{FM}	200	mA
Peak forward surge current 8.3 ms single half sine-wave	I _{FSM}	600	mA

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameters	Symbol	Test Condition	Limits		Unit
			Min	Max	
Maximum forward voltage	V _F	IF=0.1mA		240	mV
		IF=1.0mA		320	
		IF=10mA		400	
		IF=30mA		500	
		IF=100mA		1000	
Maximum reverse breakdown voltage	V _R	IR=100uA	30		V
Maximum reverse current	I _R	VR=25V		2.0	nA
Reverse Recovery time	T _{RR}	IF= IR=10mA		5	nS
		RL=100 Ω			
		IRR=0.1 X IR			
Type junction capacitance	C _T	VR=0V, f=1MHZ		10	pF

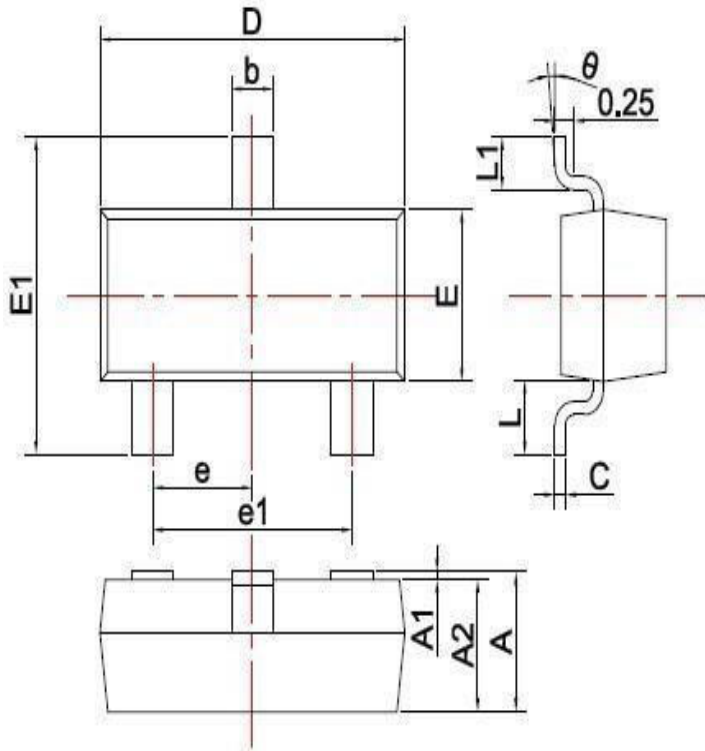
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)



Package Outline Dimensions

millimeters



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2017.02.16	First issue

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