



Schottky Barrier Diode

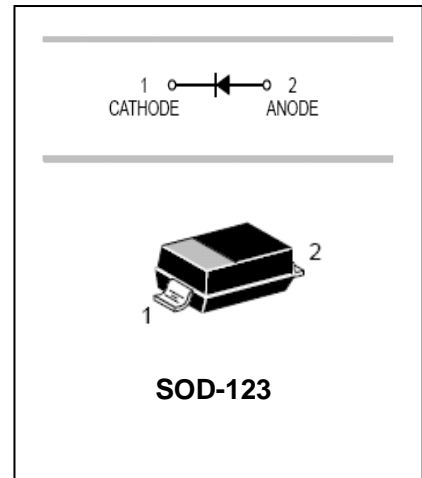
BAT54T

FEATURES

- Low turn-on voltage.
- Fast switching.
- Ultra-small surface mount package.
- PN junction guard ring for transient and ESD protection.



Lead-free



APPLICATIONS

- Schottky barrier detector and switching diodes.

ORDERING INFORMATION

Type No.	Marking	Package Code
BAT54T	L9	SOD-123

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	V_R	30	V
Forward continuous Current	I_F	200	mA
Repetitive peak Forward Current	I_{FRM}	300	mA
Forward Surge Current @t<1s	I_{FSM}	600	mA
Power Dissipation	P_d	150	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	650	°C/W
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	-65 to +125	°C



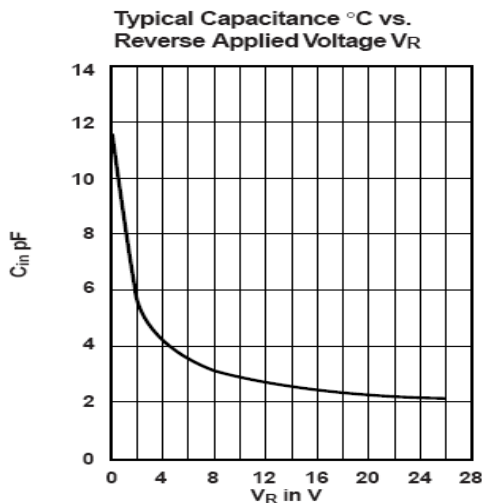
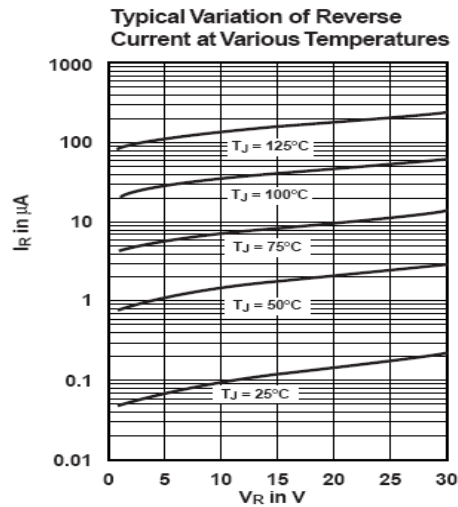
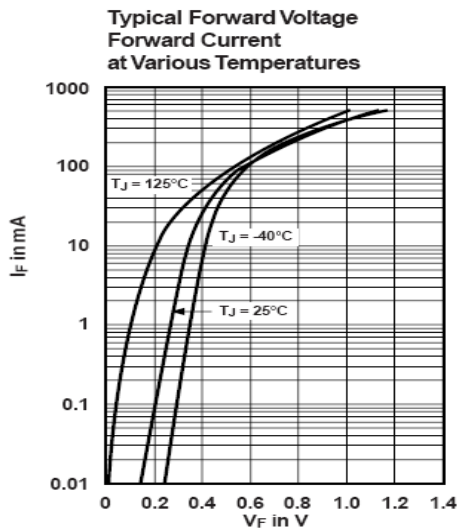
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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu A$	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	μA
Reverse recovery time	t_{rr}	$I_F=10mA, I_R=10mA$ $I_{rr}=1mA R_L=100\Omega$			5.0	ns
Capacitance between terminals	C_T	$V_R=1V, f=1MHz$			10	pF

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



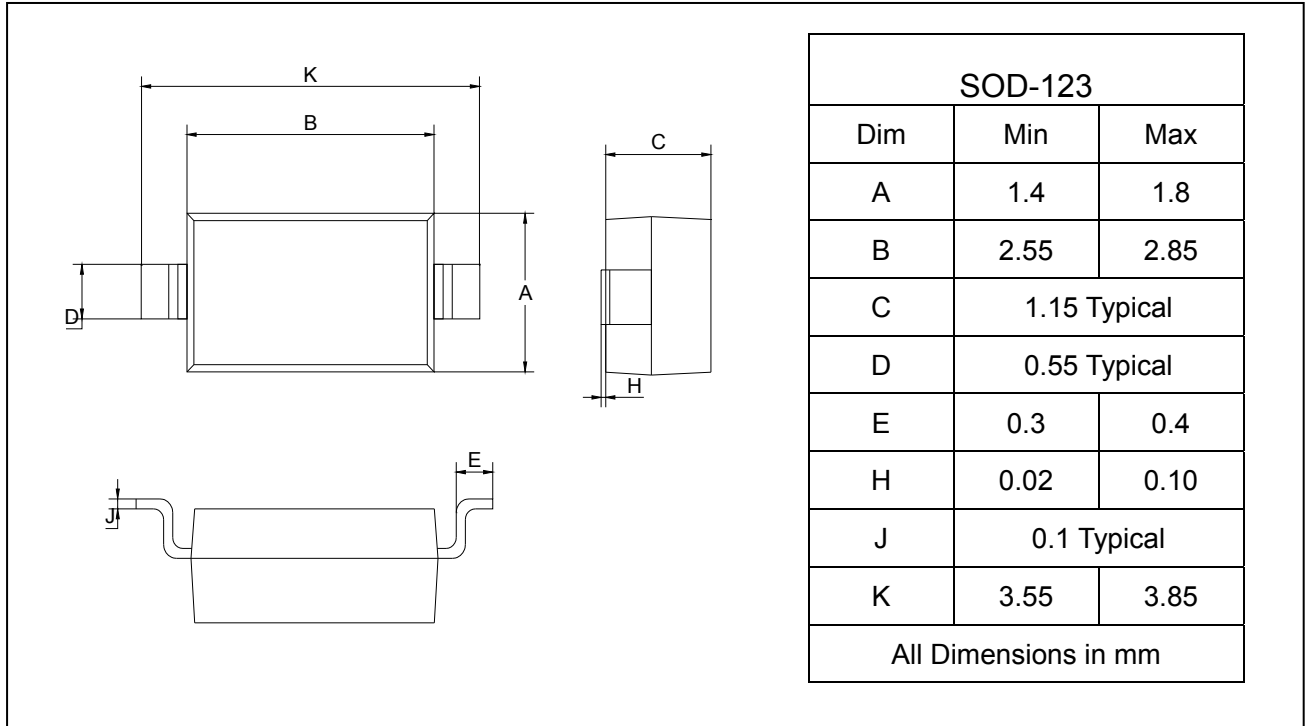
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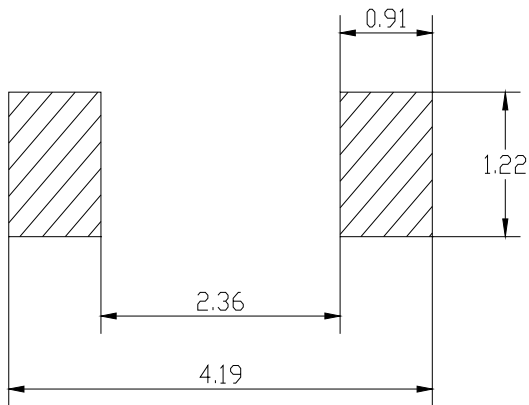
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
BAT54T	SOD-123	3000/Tape&Reel