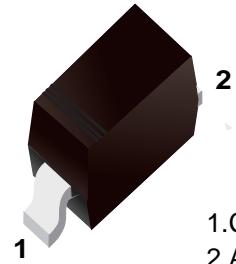



SCHOTTKY BARRIER DIODE
■ Features

- Low Switching
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material - UL Recognition Flammability Classification 94V-0


 1.Cathode
 2.Anode

■ Simplified outline(SOD-323)
Top View 
■ Absolute Maximum Ratings Ta = 25°C

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	30	V
DC Blocking Voltage	V_R		
Forward Continuous Current (Note 1)	I_F	200	mA
Rectified Peak Forward Current (Note 1) @ $T < 1.0s$	I_{FSM}	500	mA
Non-Repetitive Peak Forward Current @ $t < 10ms$	I_{FSM}	4.0	A
Power Dissipation	P_d	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to+125	°C

Note:

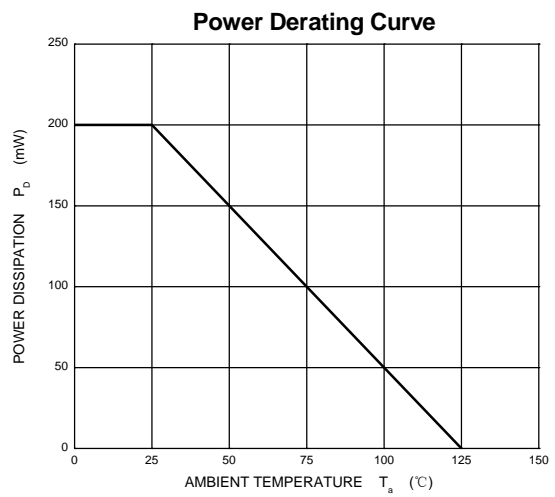
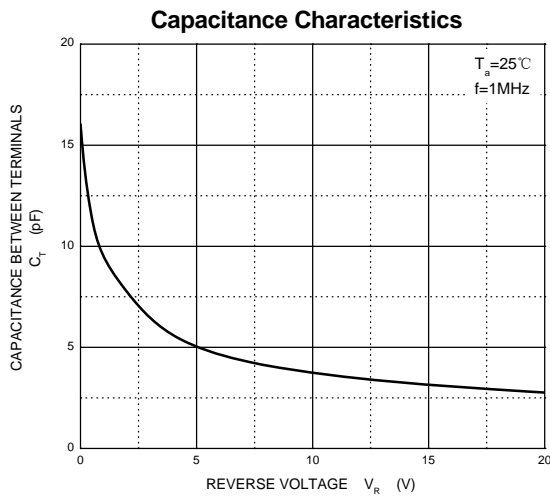
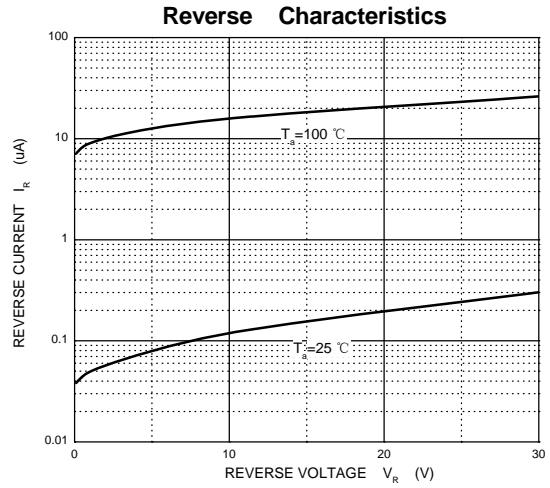
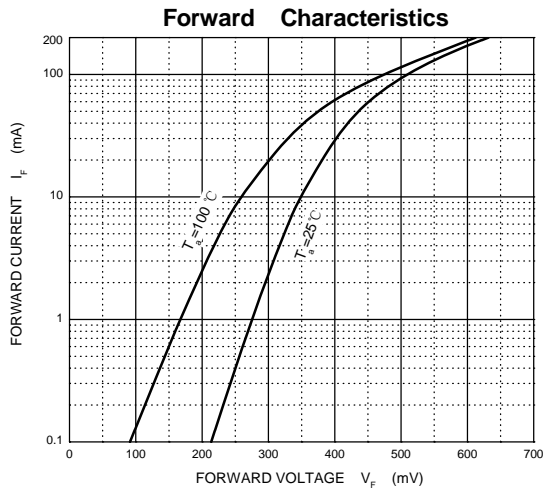
1. Valid provided that terminals are kept at ambient temperature.

■ Electrical Characteristics Ta = 25°C

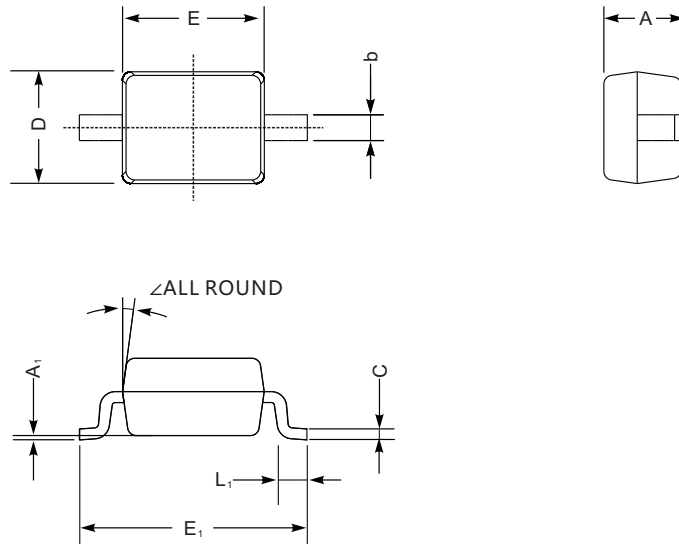
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	@ $I_{RS} = 100 \mu A$	30			V
Forward Voltage	V_F	BAT42WS @ $I_F = 1.0 mA$			0.4	V
		BAT42WS @ $I_F = 200 mA$			1.0	
		BAT43WS @ $I_F = 2.0 mA$			0.33	
		BAT43WS @ $I_F = 200 mA$			1.0	
Reverse Leakage Current	I_R	@ $V_R = 25 V$			0.5	μA
Junction Capacitance	C_j	$V_R = 1.0 V, f = 1.0 MHz$			10	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10 mA$ $I_{RR} = 0.1 \times I_R, R_L = 100 \Omega$			5.0	nS

■ Marking

Type	BAT42WS	BAT43WS
Marking	S7	S8



■ SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E ₁	b	L ₁	A ₁	∠
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	
	min	32	3.1	47	63	100	9.8	7.9	—	

■ The recommended mounting pad size

