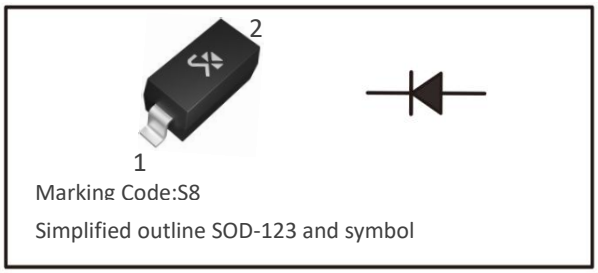
BAT43W

Schottky Barrier Rectifiers

Reverse Voltage - 30V
Forward Current - 0.2A

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Marking Code:S8
Simplified outline SOD-123 and symbol

Features

- Low Forward Voltage Drop
- Fast Switching

Absolute Maximum Ratings@T_a = 25℃ unless otherwise specified

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Reverse Voltage	V_R	30	V
Forward Continuous Current	I_{FM}	200	mA
Repetitive Peak Forward Current@t < 1s	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current@t < 10ms	I_{FSM}	2	A
Total Power Dissipation	P_{tot}	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55~+125	℃

Electrical Characteristics@T_a = 25 ℃, unless specified otherwise

Parameter	Symbol	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=100μA	30	-	V
Peak Reverse Current	I_R	V_R=25V	-	500	nA
Forward Voltage	V_F	I_F=2mA	0.26	0.33	V
		I_F=15mA	-	0.45	V
		I_F=200mA	-	1	
Total Capacitance	C_T	V_R=1V, f=1MHz	-	10	pF
Reveres Recovery Time	t_{rr}	I_F=I_R=10mA, I_{rr}=0.1*I_R, R_L=100Ω	-	5	ns

Typical Characteristics

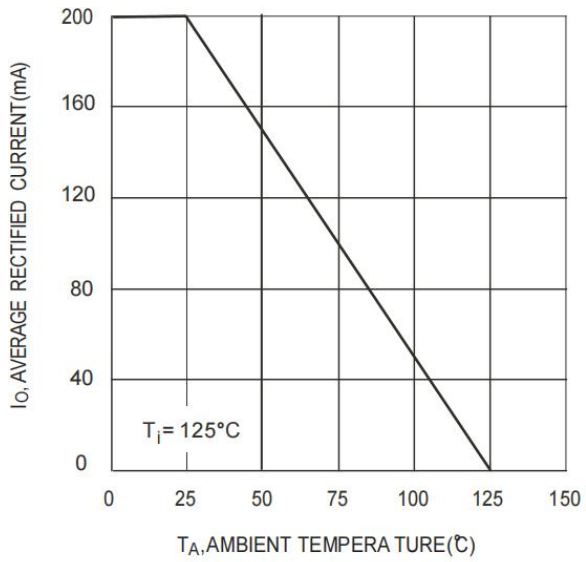


FIG. 1 Forward Current Derating Curve

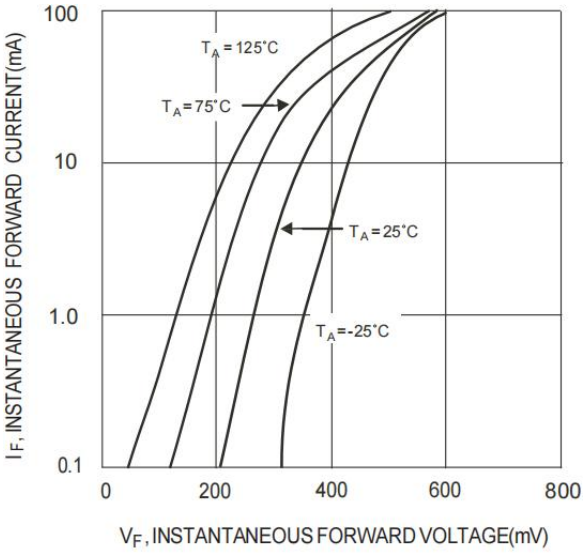


FIG. 2 Typical Forward Characteristics

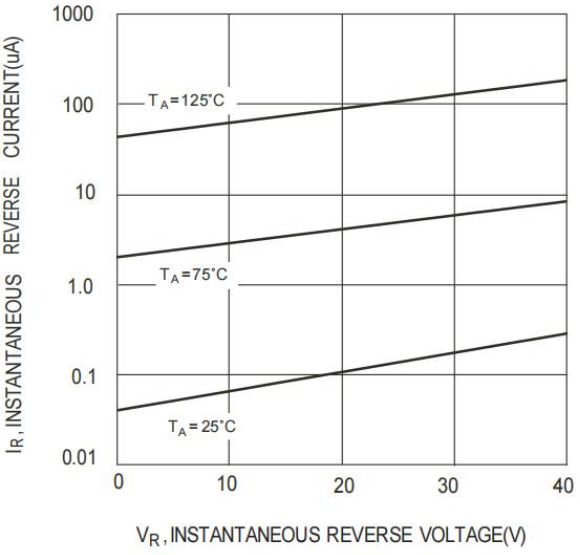


FIG. 3 Typical Reverse Characteristics

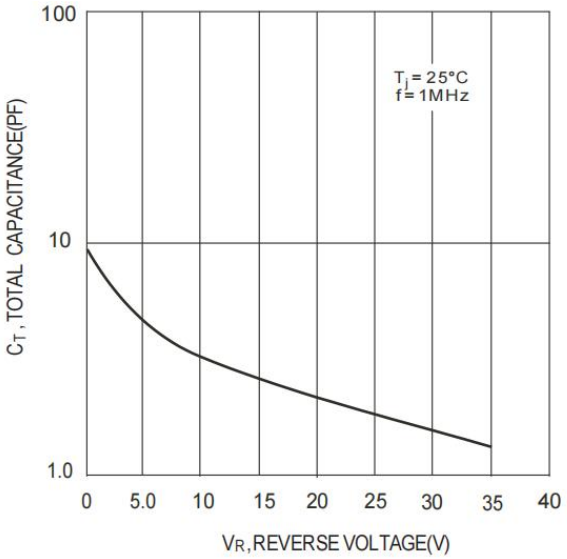
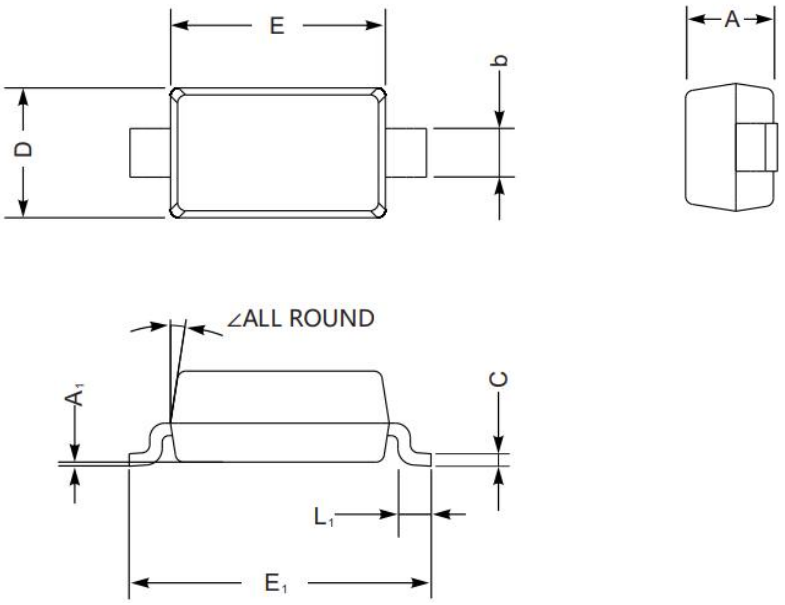


FIG. 4 Total Capacitance vs. Reverse Voltage

Package Information

SOD-123

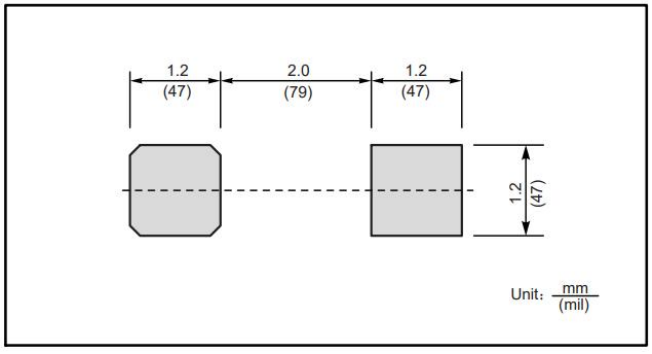
Dimensions in mm



SOD-123 mechanical data

UNIT		A	C	D	E	E_1	L_1	b	A_1	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

The recommended mounting pad size



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