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BAT46ZFILM

Schottky barrier diode

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Features

- General rectification
- Low V_F; Low I_R
- High reliability

Applications

- surface mount schottky barrier rectifier

Ordering Information

- Shipping Qty:3000/7inch Tape& Reel

SOD123

PIN	DESCRIPTION
1	Cathode
2	Anode

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Repetitive Peak Forward Current	I_{FRM}	350	mA
Continuous Forward Current	I_F	150	mA
Peak Forward Surge Current (8.3ms single half sine-wave)	I_{FSM}	0.75	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	200	mW
Thermal Resistance Junction-to-Air	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	T_J	-55 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +125	°C

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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R= 100μA	100	-	-	V
Forward Voltage	V_F	I_F = 0.1mA	-	-	0.25	V
		I_F = 10mA	-	-	0.45	V
		I_F = 250mA	-	-	1.00	V
Maximum Peak Reverse Current	I_R	V_R = 1.5V	-	-	0.5	μA
		V_R = 1.5V, T_J = 60°C	-	-	5	μA
		V_R = 10V	-	-	0.8	μA
		V_R = 10V, T_J = 60°C	-	-	7.5	μA
		V_R = 50V	-	-	2	μA
		V_R = 50V, T_J = 60°C	-	-	15	μA
		V_R = 75V	-	-	5	μA
		V_R = 75V, T_J = 60°C	-	-	20	μA
Capacitance Between Terminals	C_J	V_R = 0V, f = 1MHz	-	-	10	pF
		V_R = 1V, f = 1MHz	-	-	6	pF

Typical Electrical Characteristic Curves

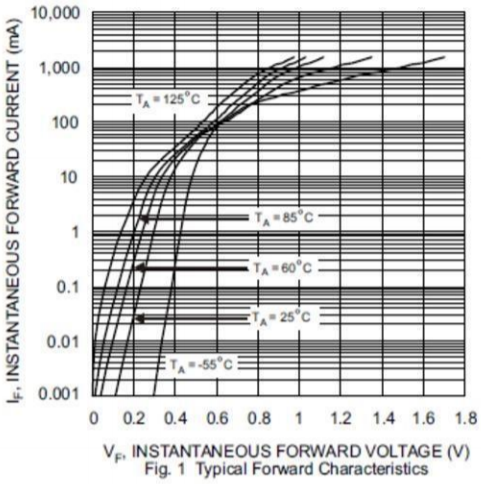


Fig. 1 Typical Forward Characteristics

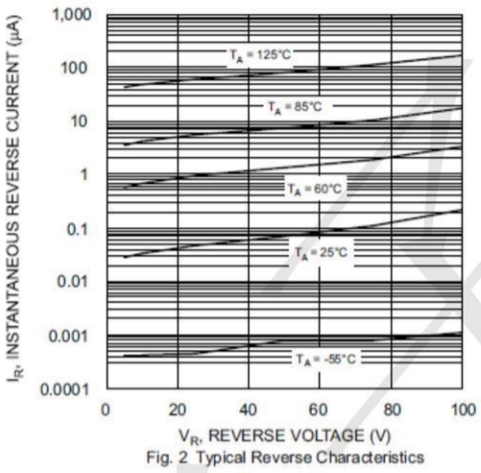


Fig. 2 Typical Reverse Characteristics

Fig 1 Typical Reverse Characteristic

Fig 2 Typical Forward Characteristics

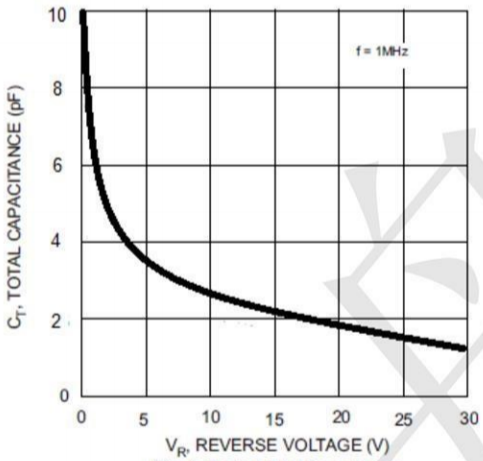


Fig. 3 Typical Total Capacitance

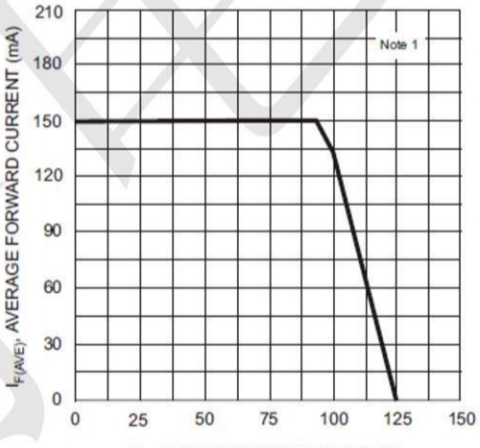
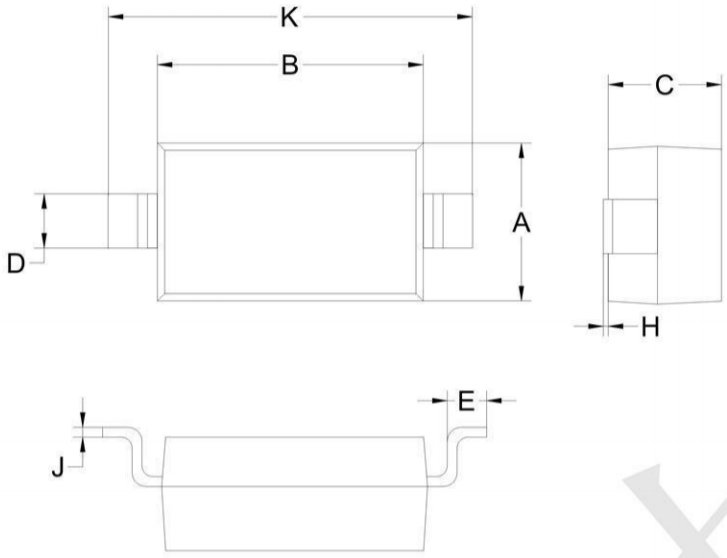


Fig. 4 Forward Current Derating

Fig 3 Capacitance Characteristics

Fig 4 Derating Curve

Outline Drawing - SOD123 (unit: mm)



SOD-123		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1.00	1.30
D	0.50	0.60
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85

Mounting Pad Layout-SOD123 (unit: mm)