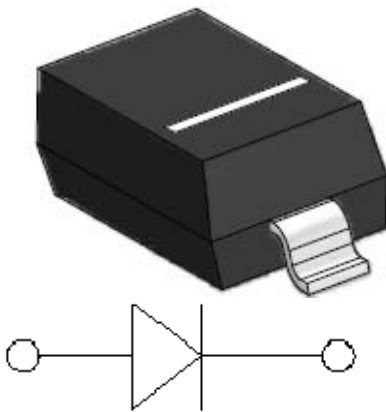


Small Signal Schottky Diode



Features

- V_R 30V
- I_{FAV} 200mA

Mechanical Data

- **Package:** SOD-123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** S7

■Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V	$I_R=10\mu\text{A}$	30
Peak forward surge current	I_{FSM}	A	$t_p=8.3\text{ms}$	4
Average forward current	I_{FAV}	mA		200
Power dissipation	P_{tot}	mW		350
Thermal Resistance	R_{thJA}	$^\circ\text{C}/\text{W}$		265
Maximum junction temperature	T_j	$^\circ\text{C}$		125
Storage temperature range	T_{stg}	$^\circ\text{C}$		-55 to +150

■Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Maximum Forward voltage	V_F	V	$I_F=10\text{mA}$	0.4
		V	$I_F=50\text{mA}$	0.65
		V	$I_F=200\text{mA}$	1
Maximum Reverse current	I_R	μA	$V_R=25\text{V}$	0.5
Minimum Breakdown voltage	V_R	V	$I_R=10\mu\text{A}$	30
Maximum Diode capacitance	C_D	pF	$V_R=1\text{V}$, $f=1\text{MHz}$	20



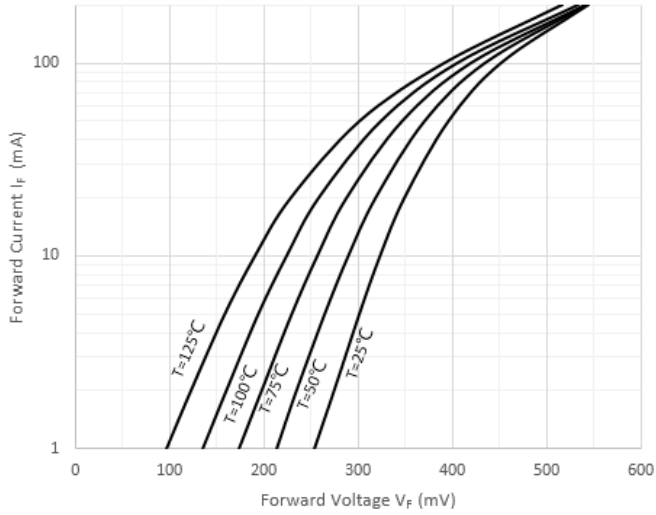
BAT42W

Ordering Information (Example)

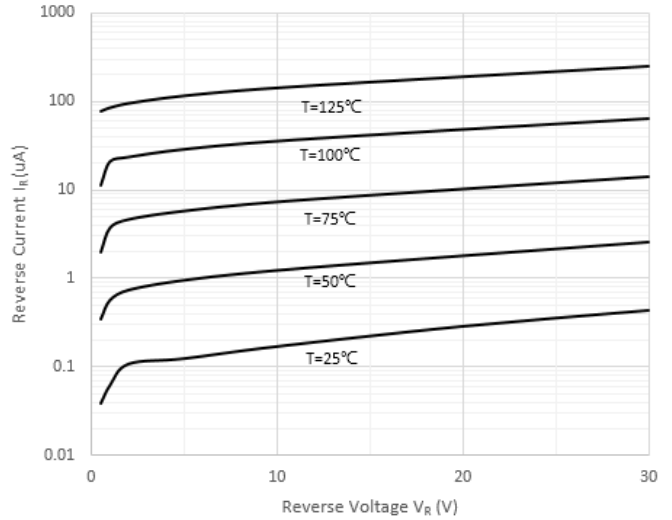
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT42W	F2	Approximate 0.011	3000	30000	120000	7" reel

Characteristics (Typical)

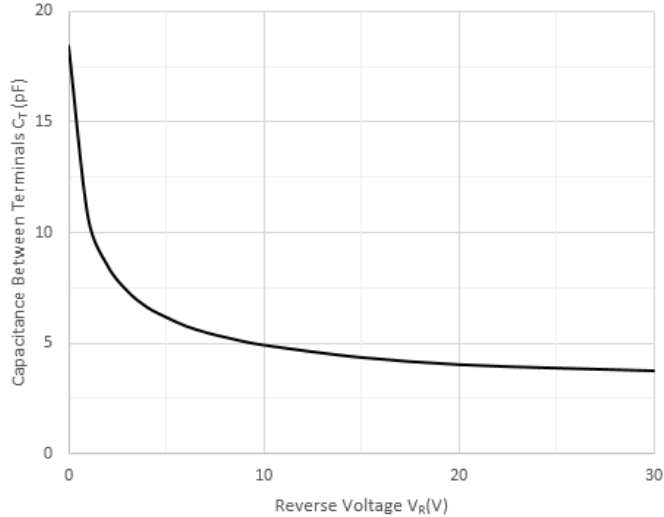
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics

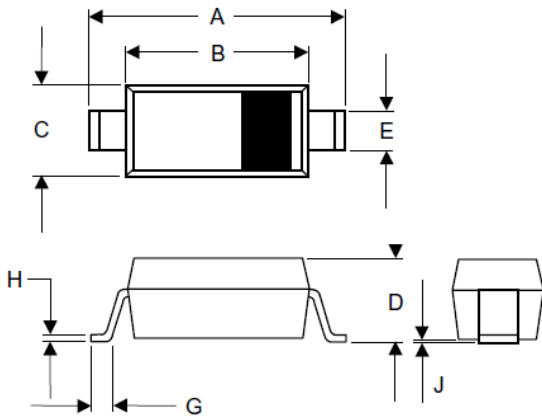




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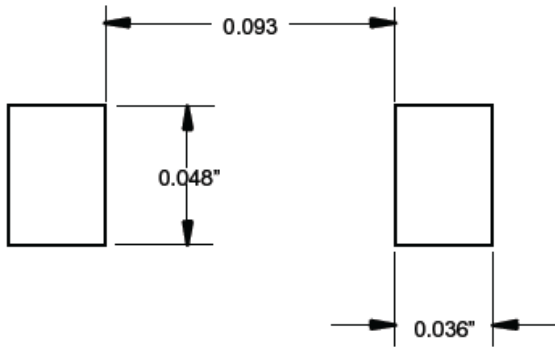
■ Outline Dimensions

SOD123



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

■ Soldering Footprint



Unit: inches



BAT42W

Disclaimer

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