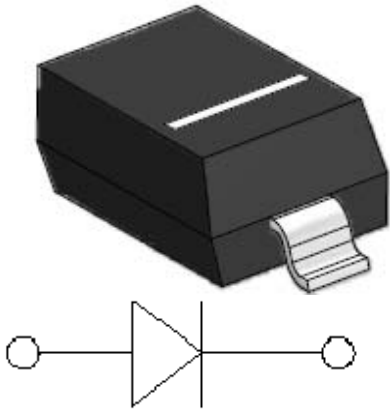


## Small Signal Schottky Diode



### 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	$I_R$	$\mu\text{A}$	$V_R=25\text{V}$	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



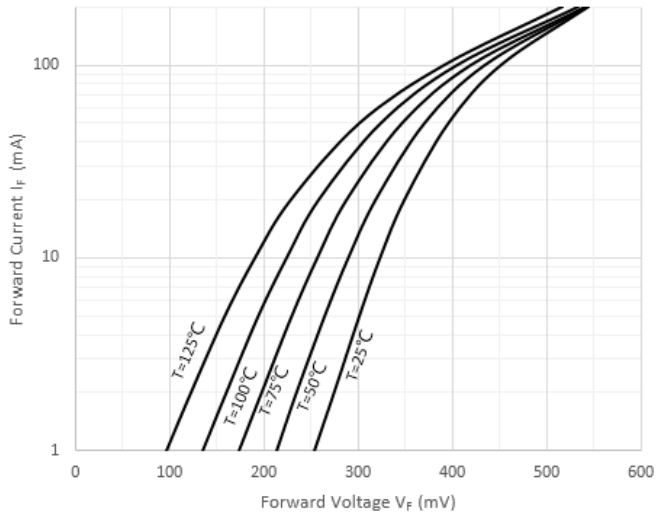
# BAT42W

## Ordering Information (Example)

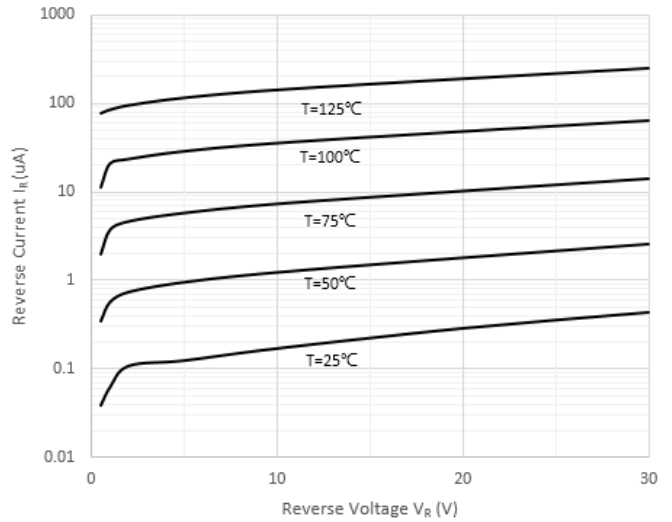
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT42W	F2	Approximate 0.011	3000	30000	120000	7" reel

## Characteristics (Typical)

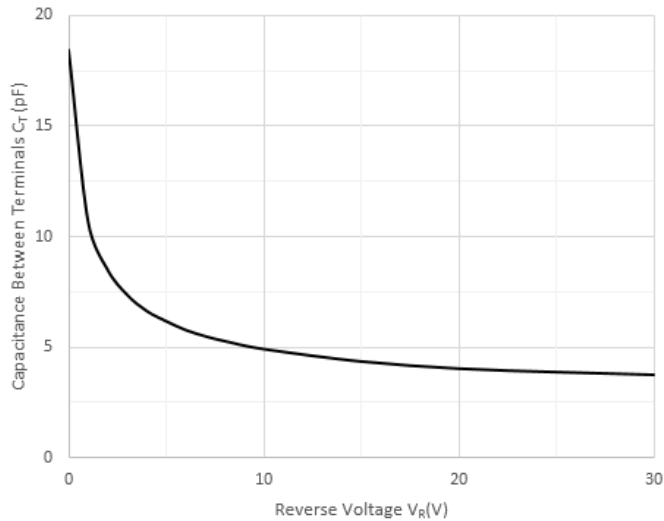
Forward Characteristics



Reverse Characteristics



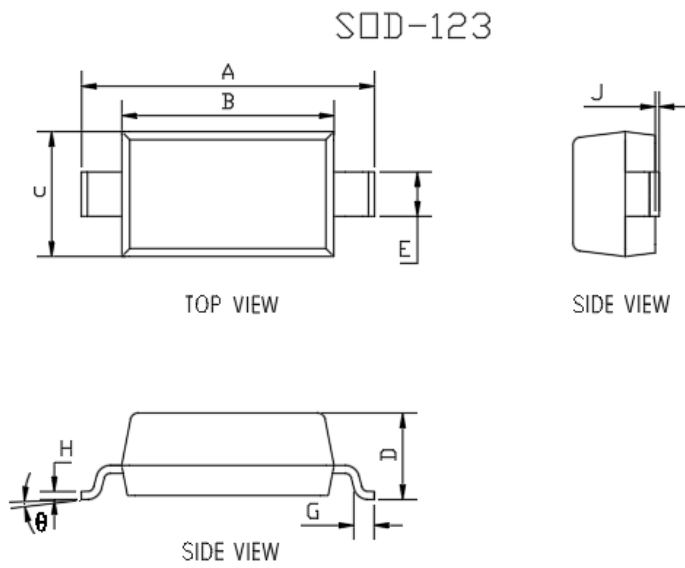
Capacitance Characteristics





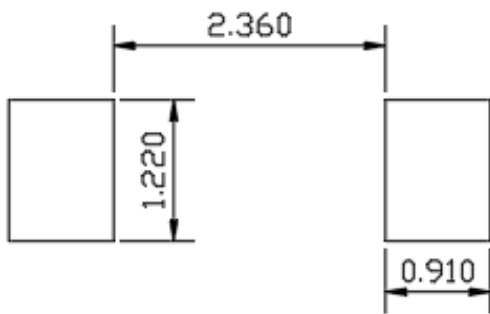
# BAT42W

## ■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
$\theta$	0	8°	0	8°

## ■ Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



## BAT42W

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