

## Schottky Barrier Rectifier

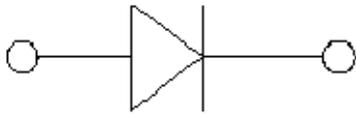


### Features

- $V_R$  40V
- $I_F$  200mA

### Typical Applications

- Low Forward Voltage Drop



### 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:** 43F

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		40
Reverse voltage	$V_R$	V	$I_R=10\mu\text{A}$	40
Average forward current	$I_F$	mA		200
Power Dissipation	$P_D$	mW		500
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	Min	Max
Forward voltage	$V_{F1}$	V	$I_F=1\text{mA}$ ,	-	0.38
	$V_{F2}$	V	$I_F=40\text{mA}$ ,	-	1
Reverse current	$I_R$	nA	$V_R=30\text{V}$	-	200
Breakdown voltage	$V_{(BR)}$	V	$I_R=10\mu\text{A}$	40	-
Diode capacitance	$C_D$	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$		5
Reverse Recovery Time	$T_{RR}$	ns	$I_F=I_R=10\text{mA}$ , $R_L=100\Omega$ , $I_R=1\text{mA}$		5

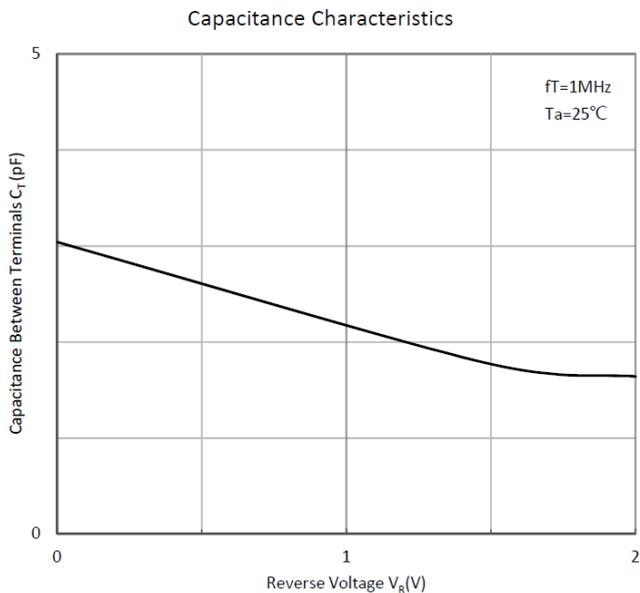
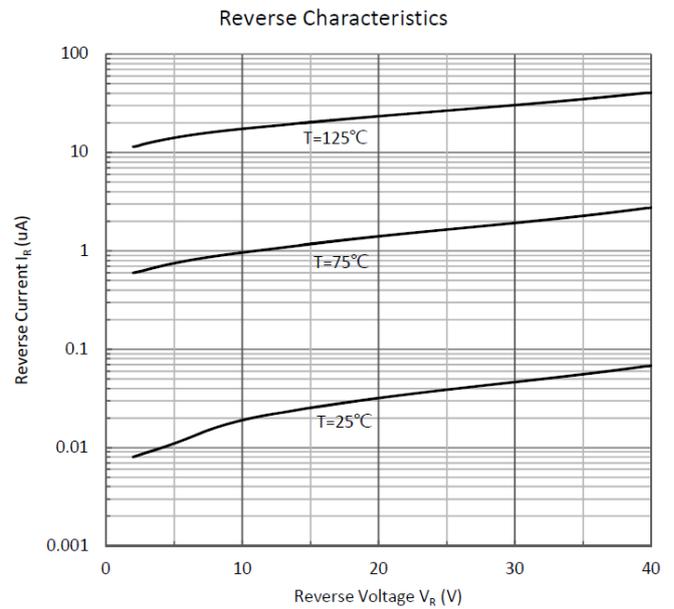
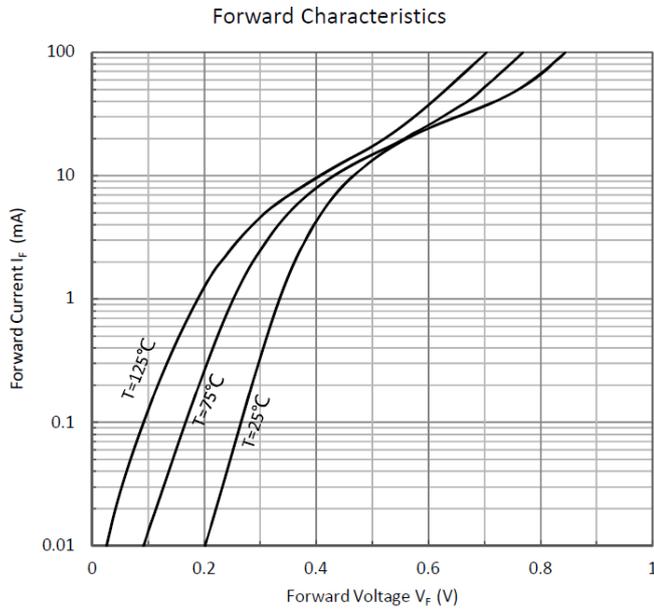


# BAS40W

## Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS40W	F2	Approximate 0.011	3000	30000	120000	7" reel

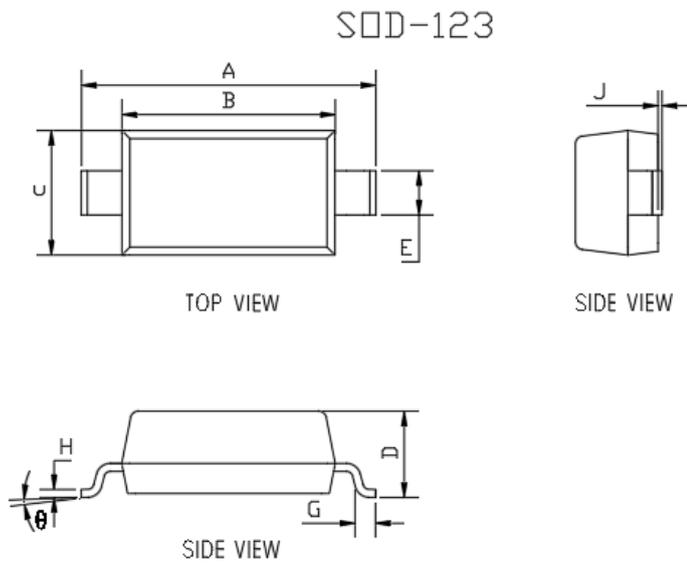
## Characteristics (Typical)





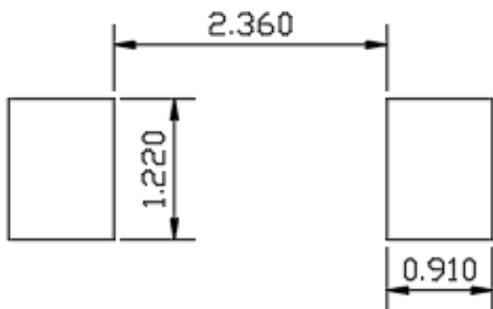
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## ■ Outline Dimensions



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

### Note:

- All dimensions are in millimeters (mm) unless otherwise specified.  
[所有尺寸均以毫米为单位, 除非另有说明]
- General tolerances:  $\pm 0.10\text{mm}$  unless otherwise specified.  
[通用公差为 $\pm 0.10\text{mm}$ , 除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.  
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- All dimensions shown are exclusive of burrs and gate residues.  
Burr and gate vestiges shall not exceed 0.15 mm in maximum.  
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
- Dimension b does not include dambar protrusion of max 0.100 mm per side.  
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
- Dimensions B and C are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.  
[B和C是塑封体的外部极限尺寸, 不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺, 但是包含了包封错位的最大尺寸]
- Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.  
[成型的管脚应为同一平面, 共面性最大为0.1mm]



## BAS40W

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