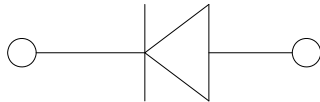


# BAS40X

## Schottky Barrier Diode



### Features

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

### Typical Applications

- Low Forward Voltage Drop

### Mechanical Data

- **Package:** SOD523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** 43

### ■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Limit Max
Power Dissipation	$P_D$	mW		150
Storage Temperature	$T_{STG}$	°C		-55 to +150
Junction Temperature	$T_J$	°C		125
DC Reverse Voltage	$V_R$	V		40
Average Rectified Forward Current	$I_{FAV}$	mA		200

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

Item	Symbol	Unit	Conditions	Min	Max
Breakdown Voltage	$V_R$	V	$I_R=100\mu\text{A}$	40	
Reverse Leakage Current	$I_R$	nA	$V_R=30\text{V}$		200
Forward Voltage	$V_F$	V	$I_F=1\text{mA}$		0.38
			$I_F=40\text{mA}$		1
Reverse Recovery Time	$T_{rr}$	ns	$I_F=I_R=10\text{mA}$ to $I_R=1\text{mA}$ , $R_L=100\Omega$		5
Capacitance	$C_j$	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$		4

### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS40X	F2	Approximate 0.0025	8000	80000	320000	7" reel

## ■ Characteristics (Typical)

Fig. 1 - Typical Instantaneous Forward Characteristics

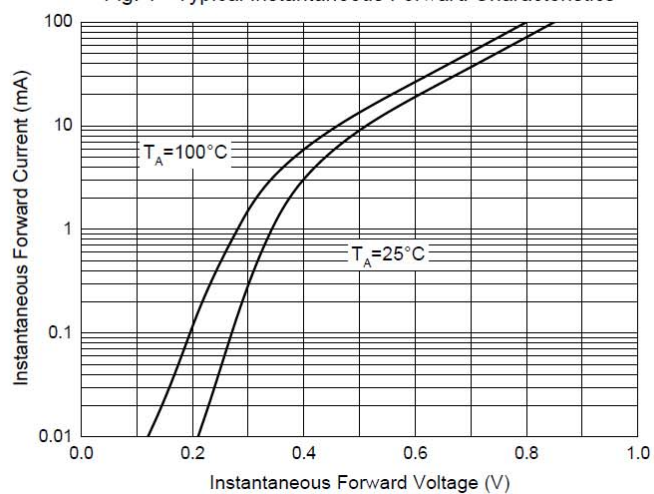


Fig. 2 - Typical Reverse Leakage Characteristics

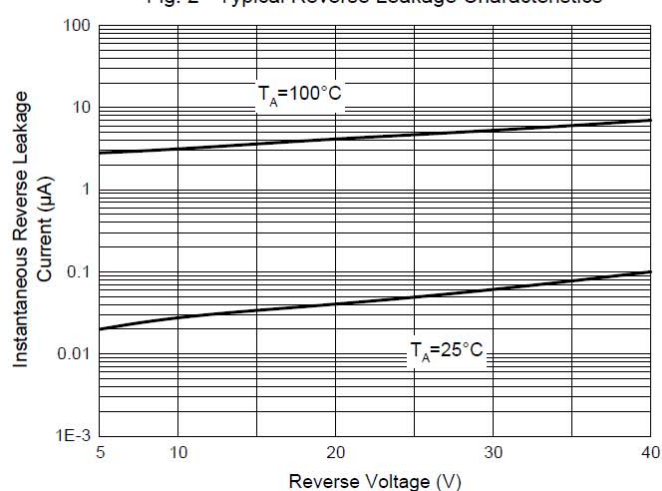
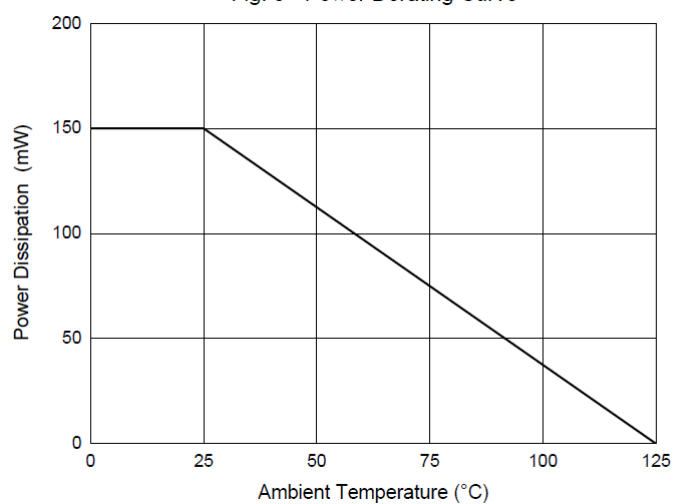
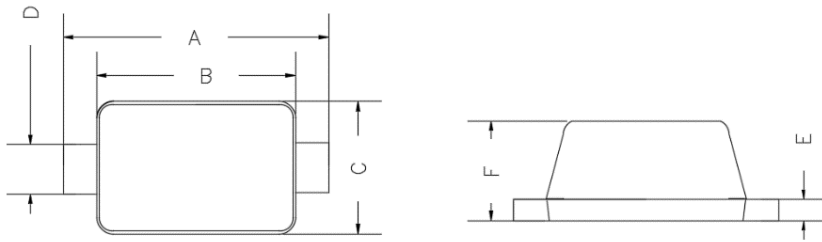


Fig. 3 - Power Derating Curve



## ■ Outline Dimensions

SOD-523

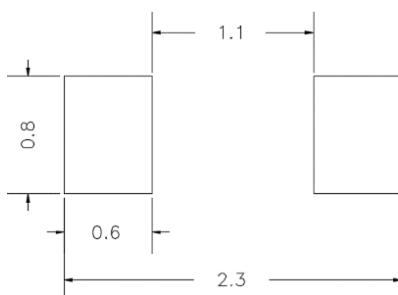


TOP VIEW

SIDE VIEW

DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

## ■ Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT

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