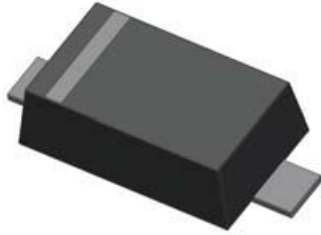


# BAS40X

## Schottky Barrier Diode



### Features

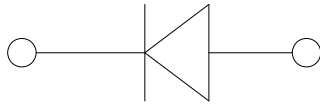
- $V_R$  40V
- $I_F$  200mA

### 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

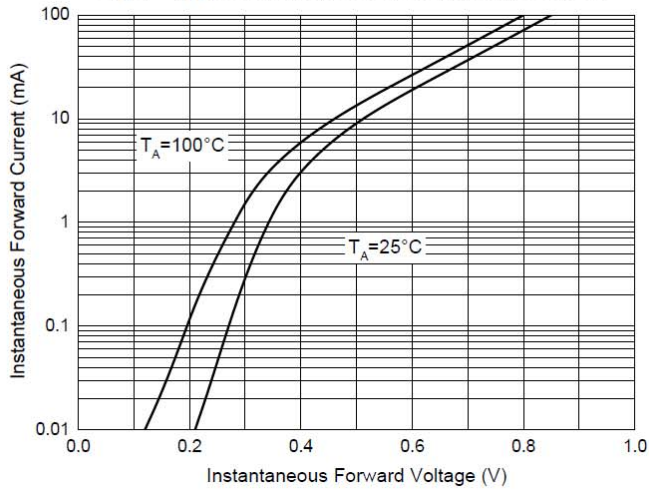


Fig. 2 - Typical Reverse Leakage Characteristics

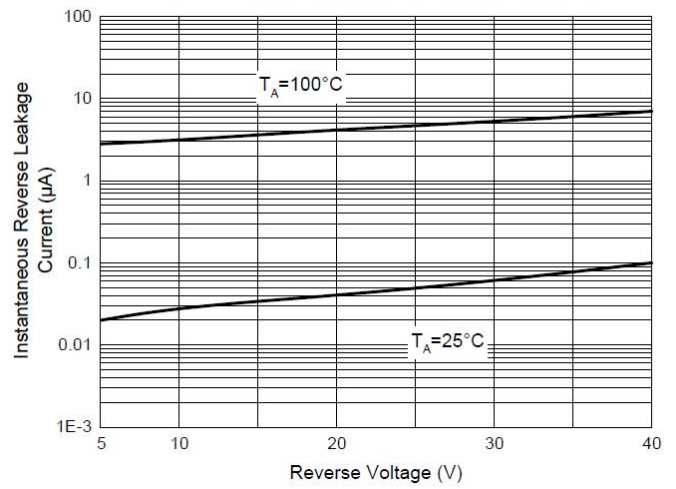
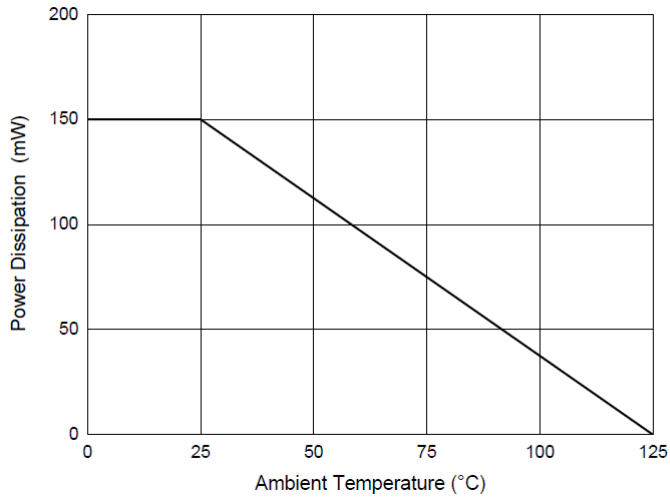
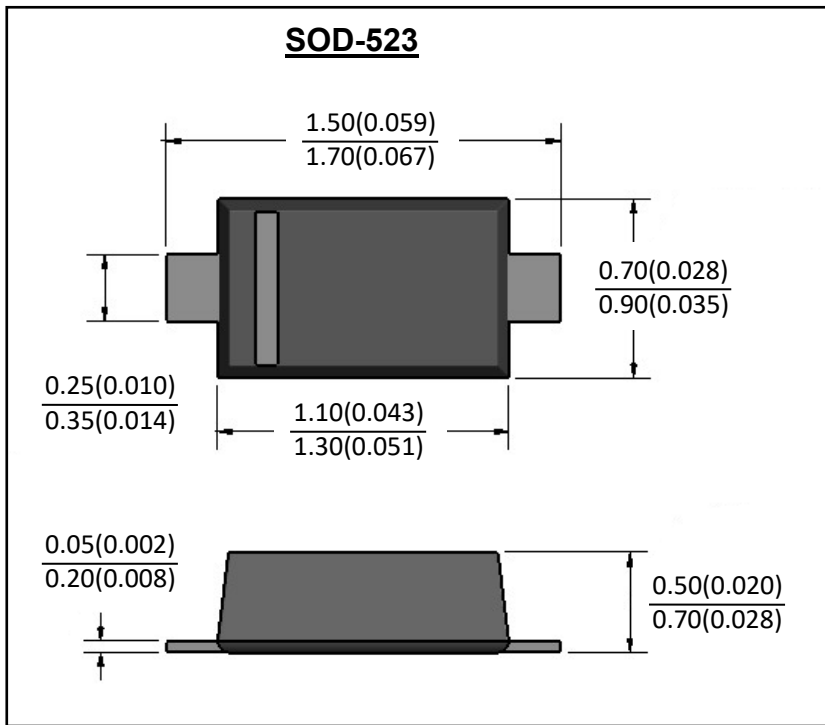


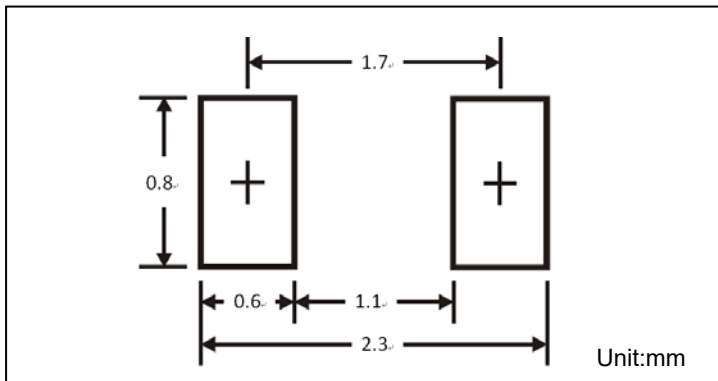
Fig. 3 - Power Derating Curve



## ■ Outline Dimensions



## ■ Soldering Footprint





## BAS40X

---

### Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.