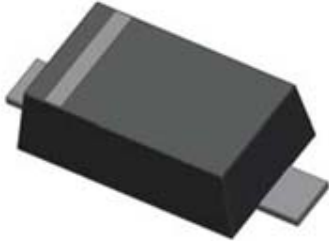
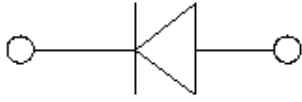


## Small Singal Schottky Barrier Diodes



**SOD523**

### Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- $V_R$  40V
- $I_{FAV}$  200mA
- Part no. with suffix "Q" means AEC-Q101 qualified

### Applications

- Low Forward Voltage Drop

### Mechanical Data

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

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	V		40
Average forward current	$I_{FAV}$	mA		200
Peak forward surge current	$I_{FSM}$	A	8.3ms single half sine-wave	1.0
Power dissipation	$P_D$	mW		150
Thermal Resistance Junction to Ambient	$R_{thJA}$	$^\circ\text{C}/\text{W}$		667
Junction temperature range	$T_j$	$^\circ\text{C}$		-55 to +125
Storage temperature range	$T_{stg}$	$^\circ\text{C}$		-55 to +125

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	Min	Typ	Max
Forward Voltage	$V_F$	V	$I_F=10\text{mA}$	-	-	0.35
			$I_F=100\text{mA}$	-	-	0.45
			$I_F=200\text{mA}$	-	-	0.59
Reverse Current	$I_R$	$\mu\text{A}$	$V_R=40\text{V}$	-	-	5
Reverse Breakdown Voltage	$V_{BR}$	V	$I_R=100\mu\text{A}$	40	-	-

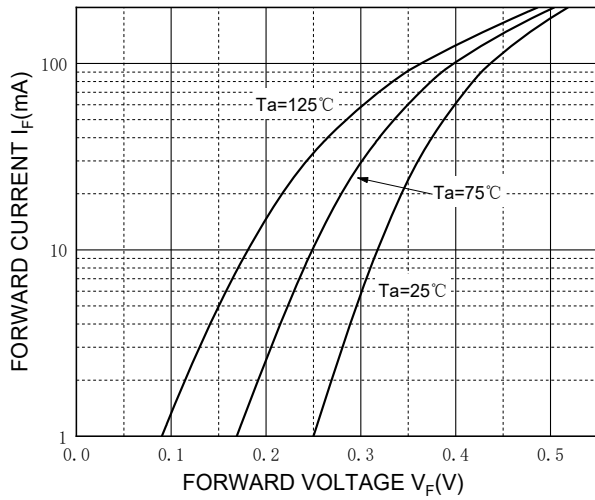
### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB521S-40Q	F2	Approximate 0.002	8000	80000	320000	7" reel

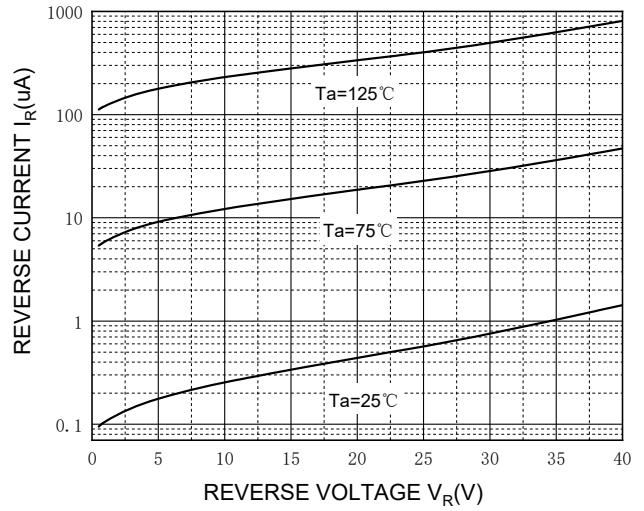


■ Characteristics (Typical)

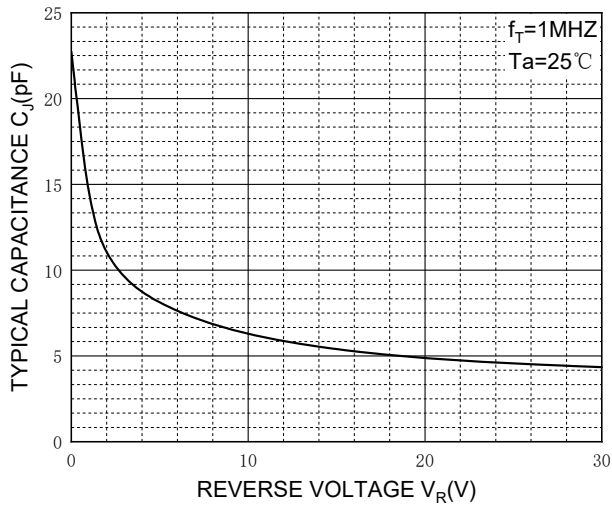
Forward Characteristics



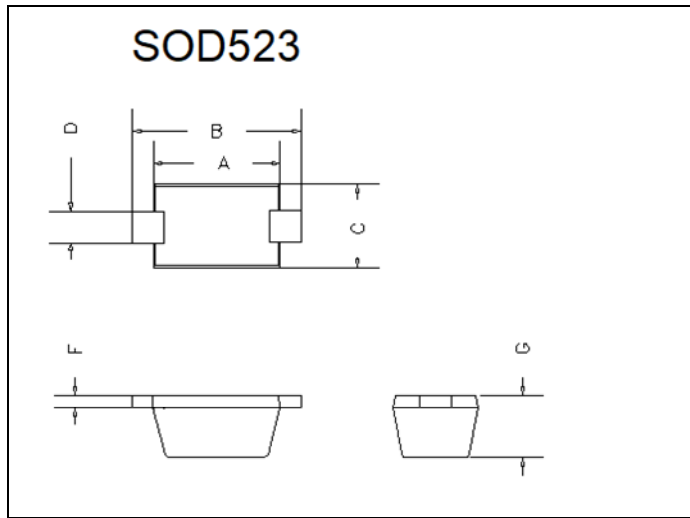
Reverse Characteristics



Capacitance Characteristics

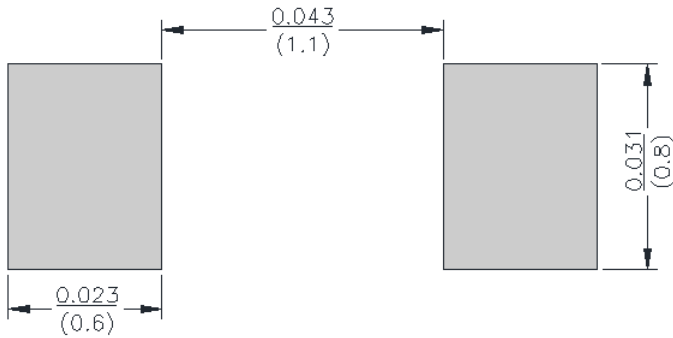


## ■ Outline Dimensions



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.043	0.051	1.10	1.30	
B	0.059	0.067	1.50	1.70	
C	0.028	0.035	0.70	0.90	
D	0.010	0.014	0.25	0.35	
F	0.002	0.008	0.05	0.20	
G	0.020	0.028	0.50	0.70	

## ■ Soldering Footprint



Unit:  $\frac{\text{inch}}{\text{mm}}$



---

**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 automotive electronics, are not designed for use in medical, life-saving, life-sustaining, or military, 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.