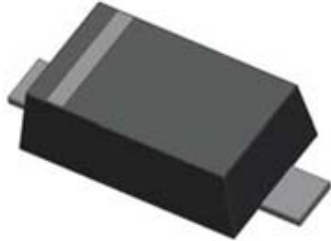
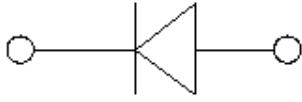


## Small Singal Schottky Barrier Diodes



**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:** 3B

### ■ 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	$R_{thJA}$	$^\circ\text{C}/\text{W}$		660
Maximum junction temperature	$T_j$	$^\circ\text{C}$		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	$I_F=100\text{mA}$			0.55
Reverse Current	$I_R$	$\mu\text{A}$	$V_R=10\text{V}$			1
Reverse Breakdown Voltage	$V_{BR}$	V	$I_R=10\mu\text{A}$	40		

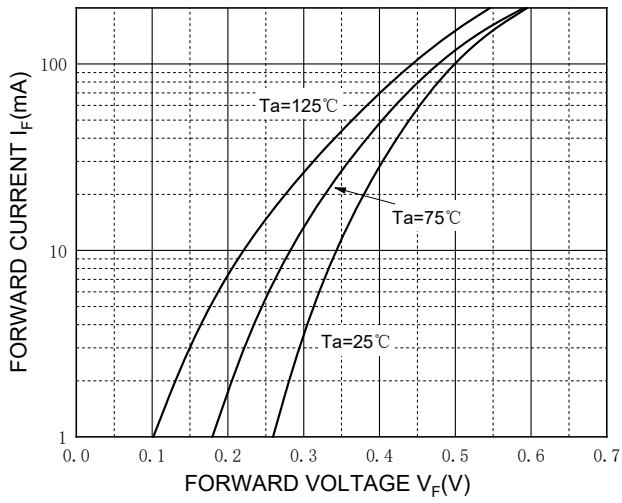
### ■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB520S-40Q	F2	Approximate 0.002	8000	80000	320000	7" reel

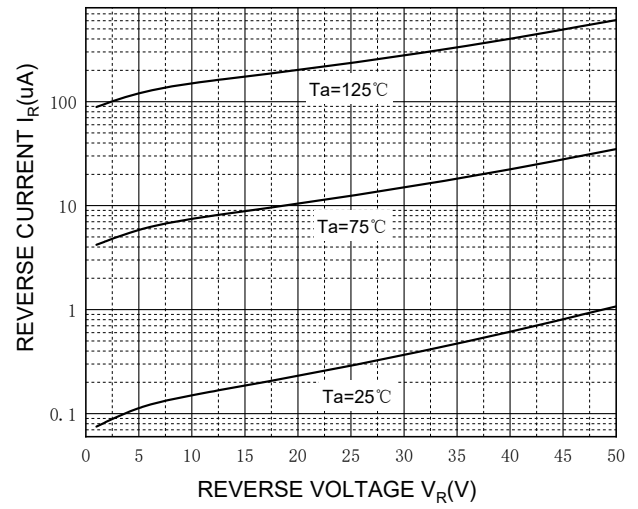


## ■ Characteristics (Typical)

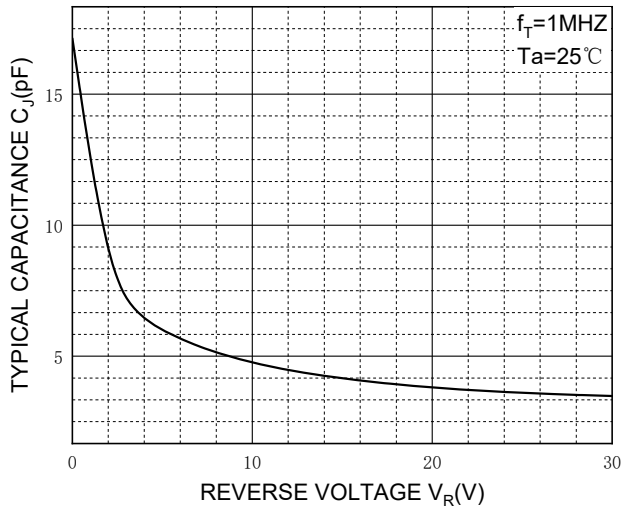
### Forward Characteristics



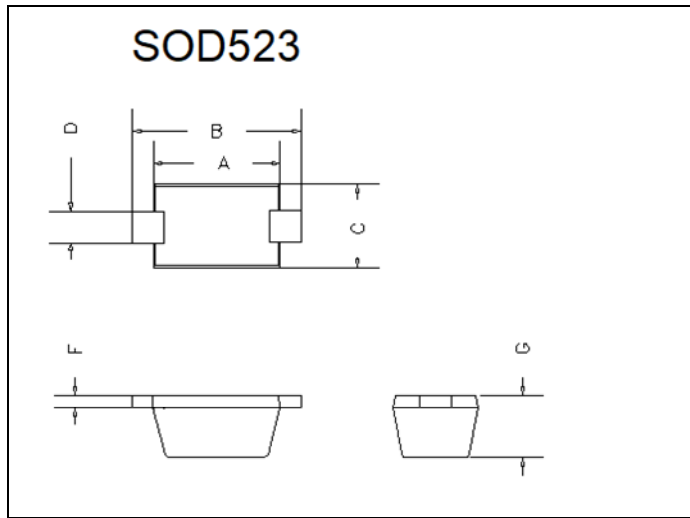
### Reverse Characteristics



### Capacitance Characteristics

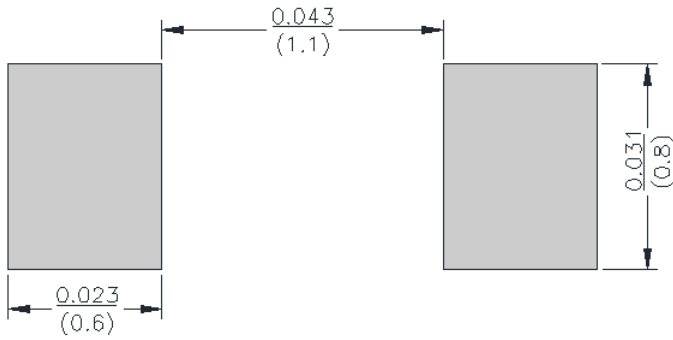


## ■ Outline Dimensions



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



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