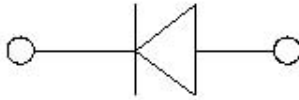
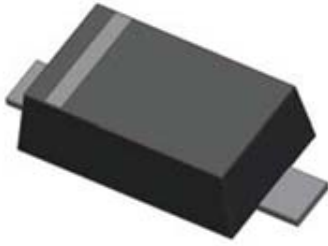


## Small Singal Schottky Barrier Diodes



### Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1
- $V_R$  30V
- $I_{FAV}$  200mA
- Part no. with suffix "Q" means AEC-Q101 qualified

### Applications

- Low Forward Voltage Drop
- Automotive

### Mechanical Data

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

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

PARAMETER	SYMBOL	UNIT	CONDITIONS	VALUE
Reverse Voltage	$V_R$	V		30
Peak Forward Surge Current	$I_{FSM}$	A	8.3ms single half sine-wave	1.0
Average Forward Current	$I_{FAV}$	mA		200
Power Dissipation	$P_{tot}$	mW		150
Thermal Resistance Junction to Ambient	$R_{thJA}$	K/W		635
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	MAX
Breakdown Voltage	$V_R$	V	$I_R=500\mu\text{A}$	30	
Forward Voltage	$V_F$	V	$I_F=200\text{mA}$		0.5
Reverse Leakage Current	$I_R$	$\mu\text{A}$	$V_R=10\text{V}$		30
Junction Capacitance	$C_j$	pF	$F=1.0\text{MHz}, V_R=1\text{V}$	10	20



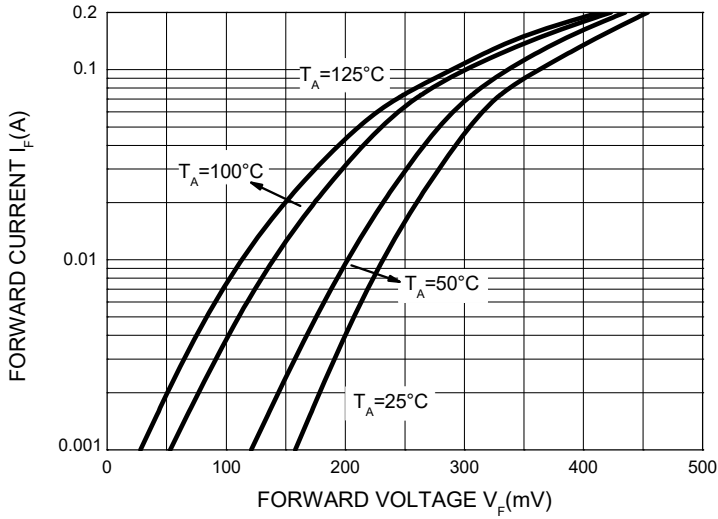
# RB521S-30Q

## Ordering Information (Example)

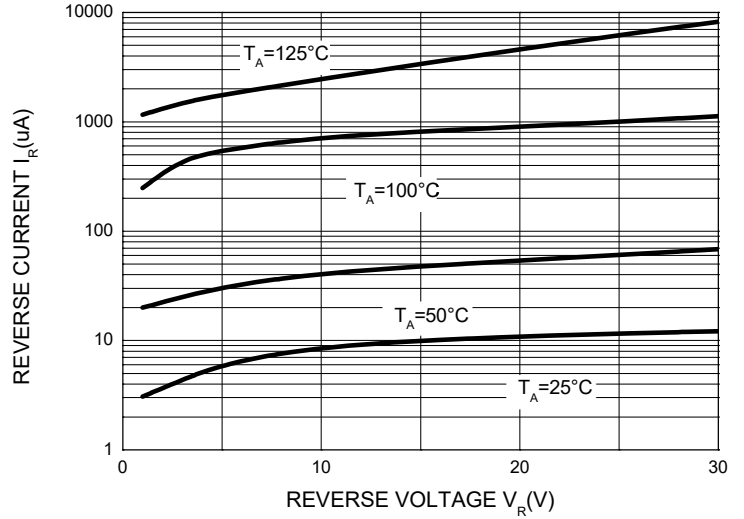
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB521S-30Q	F2	Approximate 0.002	8000	80000	320000	7" reel

## Characteristics (Typical)

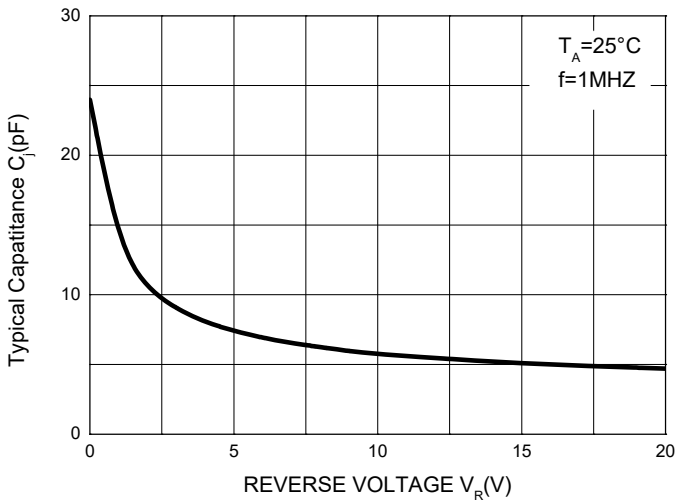
### Forward Characteristics



### Reverse Characteristics



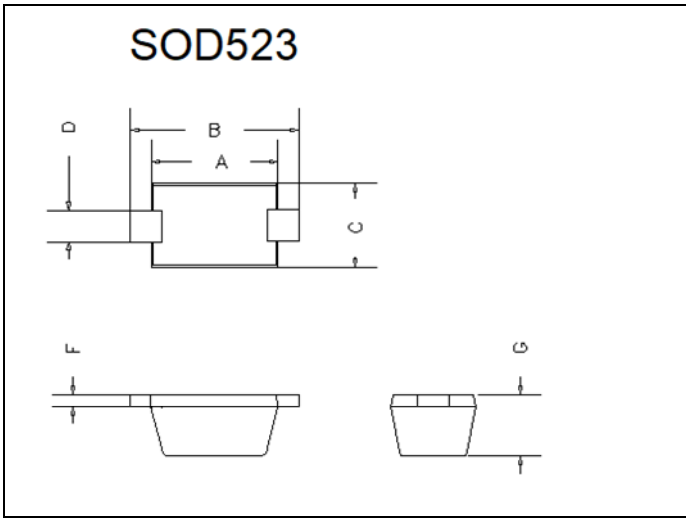
### Capacitance Characteristics





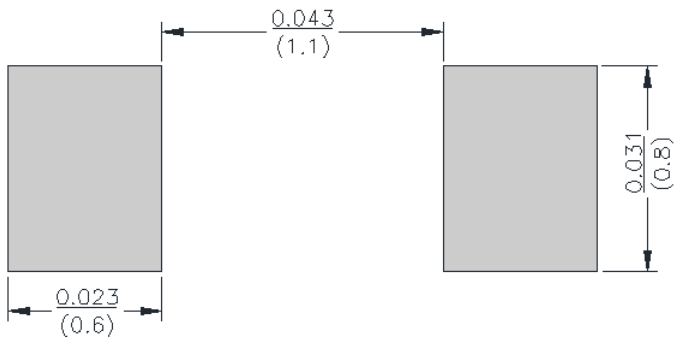
# RB521S-30Q

## ■ 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: inch(mm)



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