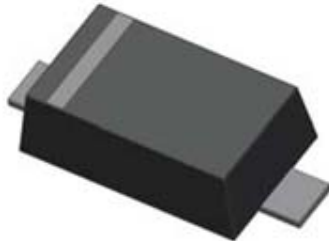
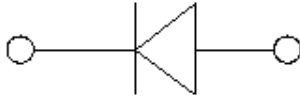


Small Singal Schottky Barrier Diodes


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	$I_F=200\text{mA}$			0.59
Reverse Current	I_R	μA	$V_R=30\text{V}$			5
Reverse Breakdown Voltage	V_{BR}	V	$I_R=100\mu\text{A}$	40		

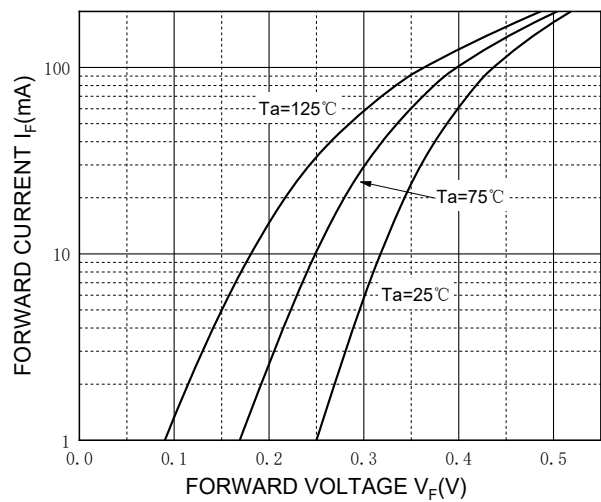
■Ordering Information (Example)

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

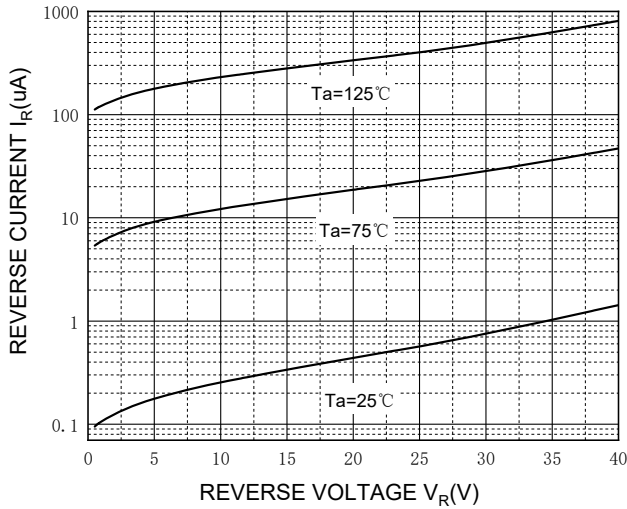


■ Characteristics (Typical)

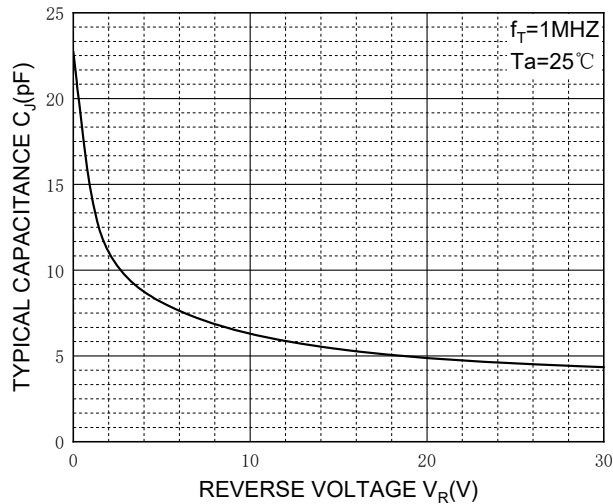
Forward Characteristics



Reverse Characteristics

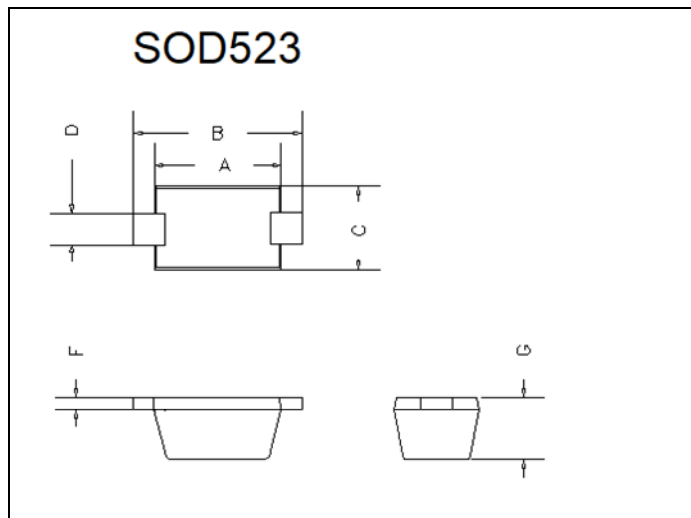


Capacitance Characteristics



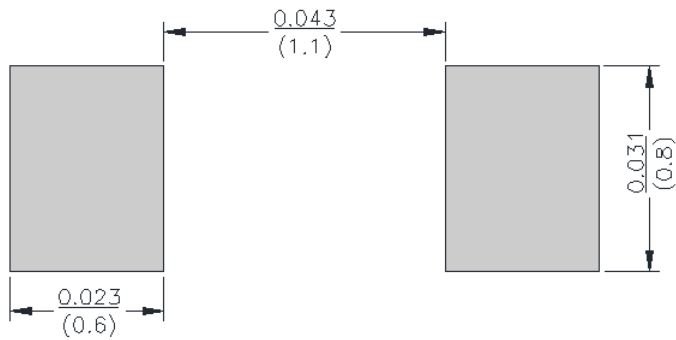


■ Outline Dimensions



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



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