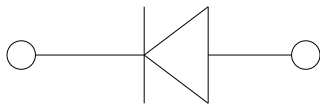
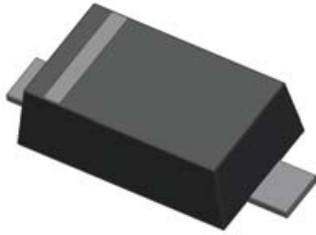


## Schottky Barrier Diode



### Features

- $V_R$  30V
- $I_F$  200mA

### Typical Applications

- Low Forward Voltage Drop

### Mechanical Data

- **Package:** SOD-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** C

### ■ Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Limit Max
Power Dissipation	$P_D$	mW		150
Storage Temperature	$T_{STG}$	°C		-40 to +125
Junction Temperature	$T_J$	°C		-40 to +125
DC Reverse Voltage	$V_R$	V		30
Average Rectified Forward Current	$I_{FAV}$	mA		200
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	A	8.3ms single half sine-wave	1.0
Repetitive Peak Forward Current	$I_{FRM}$	A	$t_p=1ms, \delta=0.25$	0.5

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

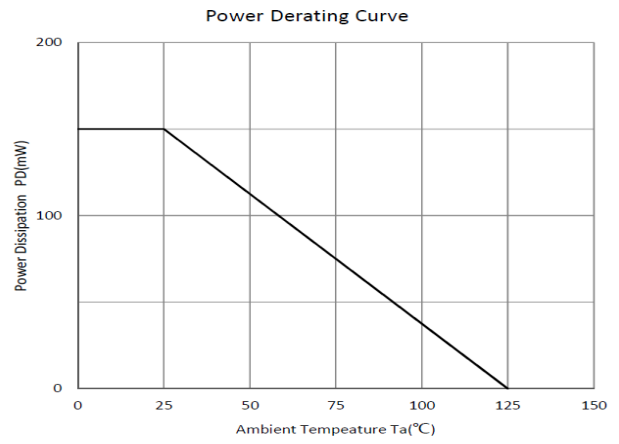
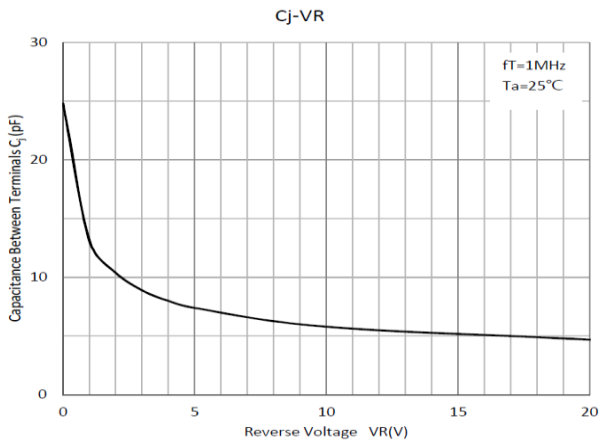
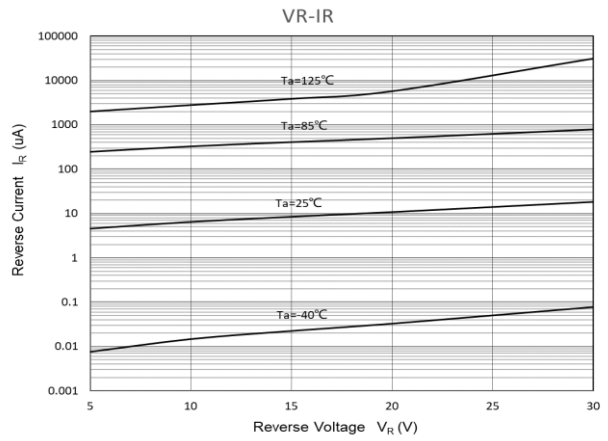
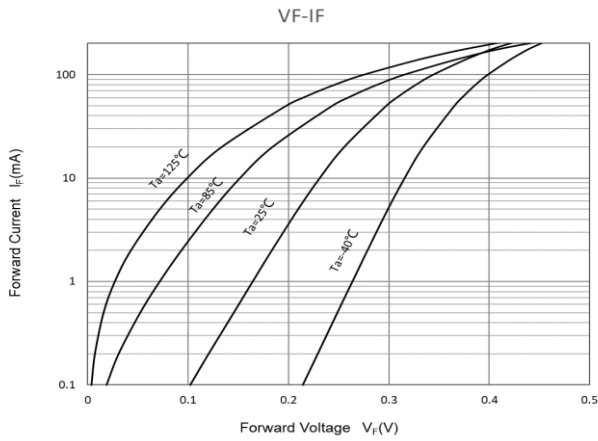
Item	Symbol	Unit	Conditions	Min	Typ	Max
Breakdown Voltage	$V_R$	V	$I_R=500\mu\text{A}$	30		
Forward Voltage	$V_F$	V	$I_F=10\text{mA}$			0.35
			$I_F=200\text{mA}$		0.43	0.5
Reverse Leakage Current	$I_R$	$\mu\text{A}$	$V_R=10\text{V}$			30
Junction Capacitance	$C_J$	pF	$F=1.0\text{MHz}, V_R=1\text{V}$		10	20

### ■ Ordering Information (Example)

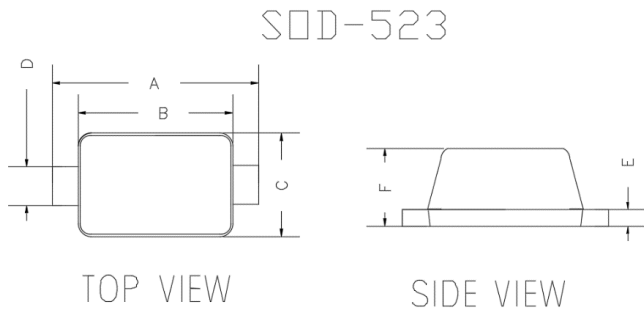
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB521S-30	F2	Approximate 0.0025	8000	80000	320000	7" reel
RB521S-30	F3	Approximate 0.002	3000	30000	120000	7" reel



■Characteristics(Typical)



## ■ SOD-523 Package Outline Dimensions

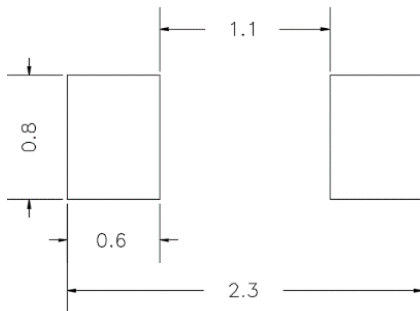


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

**Note:**

1. All dimensions are in millimeters (mm) unless otherwise specified.  
[所有尺寸均以毫米为单位, 除非另有说明]
2. General tolerances:  $\pm 0.10\text{mm}$  unless otherwise specified.  
[通用公差为 $\pm 0.10\text{mm}$ , 除非另有说明]
3. Dimensions and tolerances per ASME Y14.5M-2018.  
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
4. All dimensions shown are exclusive of burrs and gate residues.  
Burr and gate vestiges shall not exceed 0.15 mm in maximum.  
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
5. Dimension b does not include dambar protrusion of max 0.100 mm per side.  
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
6. Dimensions B and C are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.  
[B和C是塑封体的外部极限尺寸, 不包括封装溢料、内引线溢料、凸出部分以及胶体毛刺, 但是包含了封装错位的最大尺寸]
7. Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.  
[成型的管脚应为同一平面, 共面性最大为0.1mm]

## ■ SOD-523 Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



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