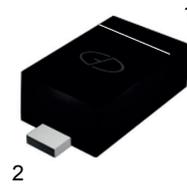


## Features

- Low current rectification
- Low forward voltage
- SOD523 micro SMD package
- RoHS compliant
- UL-94 V-0 / Green EMC
- Matte tin lead finish (Pb-Free)



SOD-523



Schematic Diagram

## Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	30	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	30	V
Continuous Forward Current	I <sub>O</sub>	200	mA
Non-Repetitive Peak Forward Current <sup>1</sup>	I <sub>FSM</sub>	1	A
Junction Temperature	T <sub>J</sub>	-55 to +125	°C
Storage Temperature	T <sub>STG</sub>	-55 to +125	°C

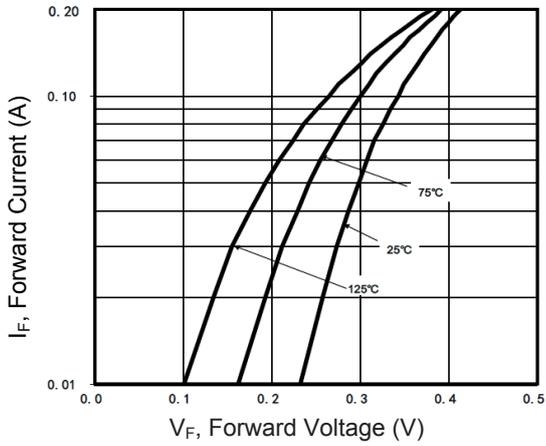
Note:

1. 8.3mS single half sine-wave.

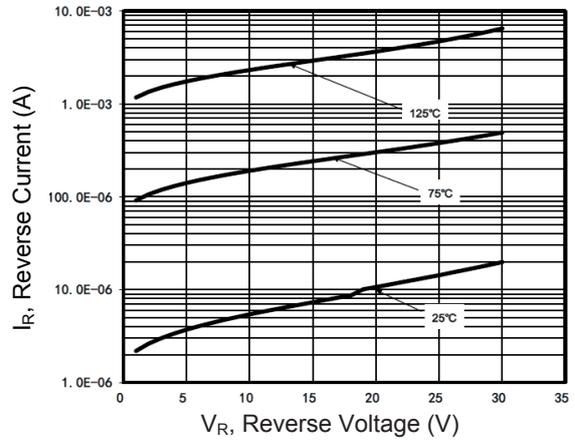
## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	-	-	0.35	V
		I <sub>F</sub> =200mA	-	-	0.5	
Breakdown Voltage	BV <sub>R</sub>	I <sub>R</sub> =500μA	30	-	-	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =10V	-	-	30	μA
		V <sub>R</sub> =20V	-	-	100	

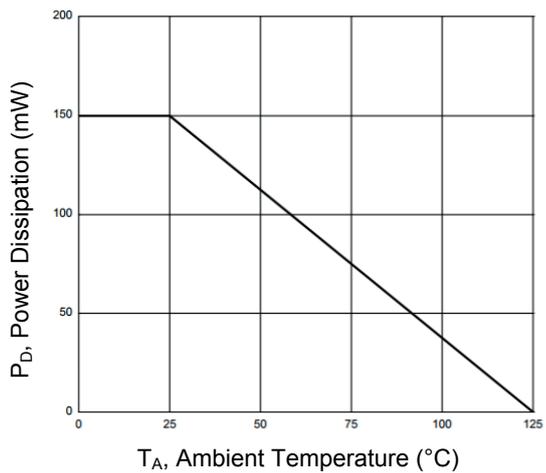
**Typical Electrical Characteristic Curves**



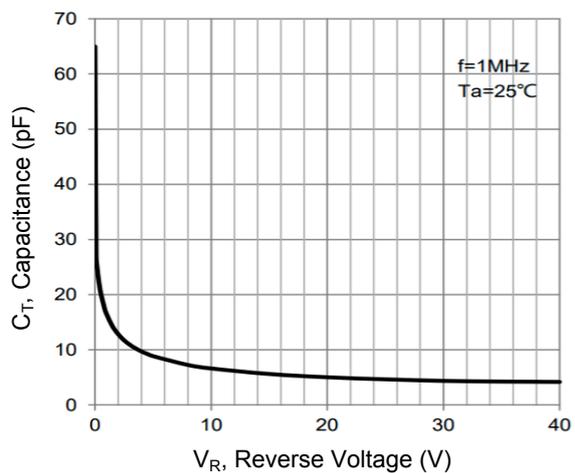
**Figure 1. Forward Characteristics**



**Figure 2. Reverse Characteristics**

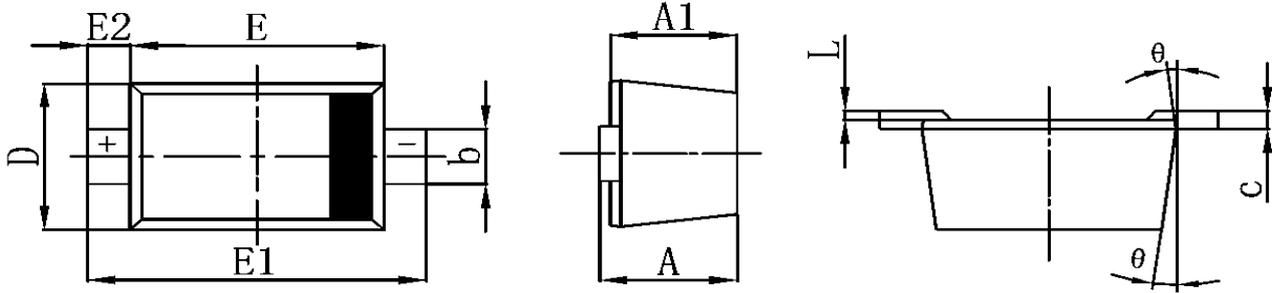


**Figure 3. Power Derating Curve**



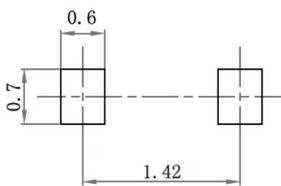
**Figure 4. Capacitance Characteristics**

**Package Outline Dimensions (SOD-523)**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

**Recommended Pad Layout**



Note:

1. Controlling dimension: in millimeters
2. General tolerance: ±0.05mm
3. The pad layout is for reference purposes only

**Order Information**

Device	Package	Marking	Carrier	Quantity
GSK02V530	SOD-523	C	Tape & Reel	8,000pcs / Reel

For more information, please contact us at: [inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)