

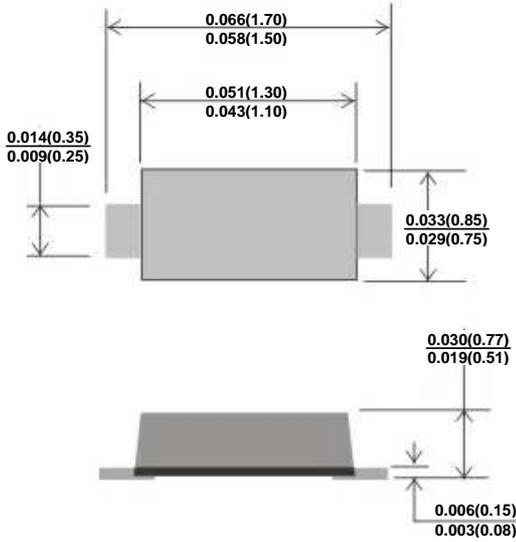


# 1SS400

## SURFACE MOUNT SWITCHING DIODE

High speed switching

### SOD-523



DIMENSIONS (mm are the original dimensions)

### FEATURES

- 1) Extremely small surface mounting type.
- 2) High Speed.
- 3) High reliability.

### MECHANICAL DATA

**Case:** JEDEC SOD-523, Molded plastic, Silicon epitaxial planar.

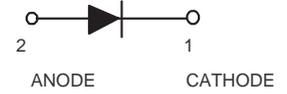
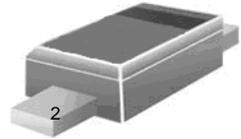
We declare that material of product compliance with RoHS requirements.

**Terminals:** Solderable per MIL-STD-750 Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Approx. Weight:** 0.0001 ounce, 0.0014 grams



### MAXIMUM RATINGS $T_J = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED

Parameter	Symbol	Limits	Unit
Peak reverse voltage	$V_{RM}$	90	V
Continuous reverse voltage	$V_R$	80	V
Continuous forward current	$I_F$	225	mA
Non-repetitive peak forward current, $t=0.001\text{ms}$ , Square wave	$I_{FSM}$	4	A
Total power dissipation (note1)	$P_{TOT}$	200	mW
Thermal resistance, Junction to ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating junction and Storage temperature range	$T_{stg}$	- 55 ~ +150	$^\circ\text{C}$

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified.

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage (note 2)	$I_F=100\text{mA}$	$V_F$	-	-	1.2	V
Reverse leakage current	$V_R=80\text{V}$	$I_R$	-	-	0.1	$\mu\text{A}$
Junction capacitance	0V dc bias, $f=1\text{MHz}$	$C_D$	-	3	-	pF
Reverse recovery time	$I_F=10\text{mA}$ , $I_R=10\text{mA}$ $R_L=100\ \Omega$ ; measured at $I_{Rrec}$	$T_{RR}$	-	-	4	ns

Note1: FR-5 Board 1.0x0.75x0.062 inch

Note2: Short duration pulsed test to avoid self-heating effect



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## RATINGS AND CHARACTERISTIC CURVES

