



# 1SS400-AU

## Surface Mount Switching Diodes

**Voltage**

**100 V**

**Power**

**175 mW**

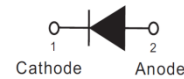
### Features

- Fast switching speed.
- Very low leakage current
- Low capacitance
- Surface mount package Ideally Suited for Automatic insertion
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case: SOD-523 Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0014 grams

SOD-523



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

PARAMETER	SYMBOL	LIMIT	UNITS
Reverse Voltage	V <sub>R</sub>	100	V
Peak Reverse Voltage	V <sub>RM</sub>	100	V
Maximum Average Forward Current	I <sub>F(AV)</sub>	225	mA
Non-repetitive Peak Forward Current	I <sub>FSM</sub>	4	A
	tp = 0.001 ms		
Power Dissipation <sup>(Note 1)</sup>	P <sub>D</sub>	175	mW
Typical Junction Capacitance	C <sub>J</sub>	1	pF
Measured at 1 MHz And Applied V <sub>R</sub> = 0 V			
Typical Thermal Resistance <sup>(Note 1)</sup>	R <sub>θJA</sub>	710	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55~150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C



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## Electrical Characteristics ( $T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	$V_F$	$I_F = 100\text{ mA}, T_J = 25\text{ }^\circ\text{C}$	-	-	1.2	V
Reverse Current	$I_R$	$V_R = 80\text{ V}, T_J = 25\text{ }^\circ\text{C}$	-	-	0.1	$\mu\text{A}$
Maximum Reverse Recovery Time <sup>(Note 2)</sup>	$T_{RR}$	---	-	-	4	ns

**NOTES :**

1. Mounted on a FR4, single-sided copper, with 114 x 76mm PCB.
2. Test Condition :  $I_F=10\text{mA}$  to  $I_R=10\text{mA}$ , Recovery to 1mA,  $R_L=100\Omega$ .



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## TYPICAL CHARACTERISTIC CURVES

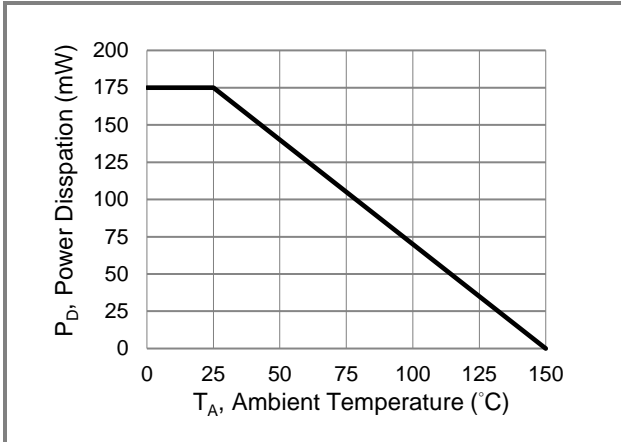


Fig.1 Power Derating Curve

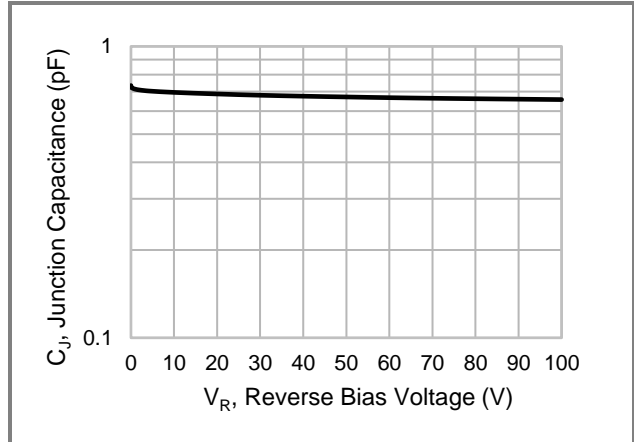


Fig.2 Typical Junction Capacitance

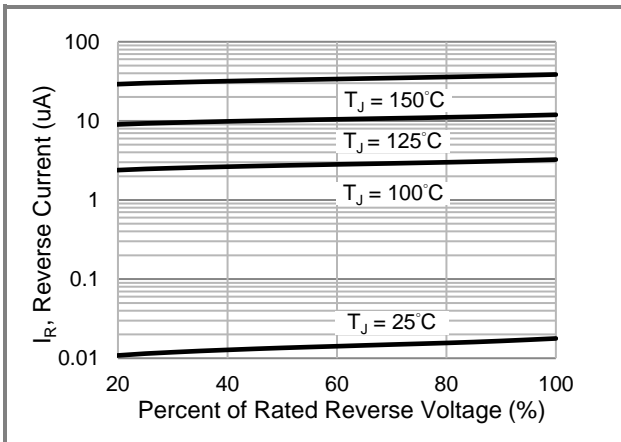


Fig.3 Typical Reverse Characteristics

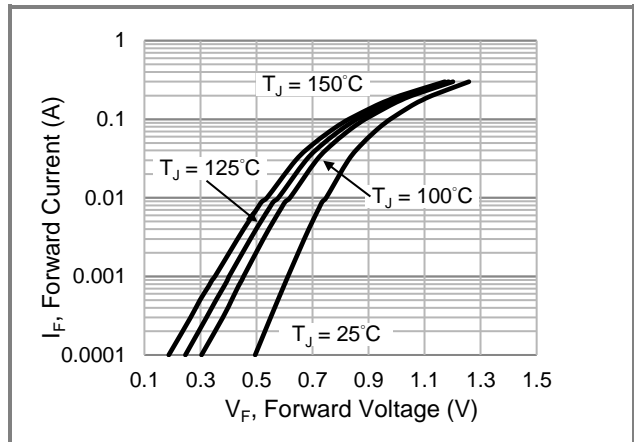


Fig.4 Typical Forward Characteristics

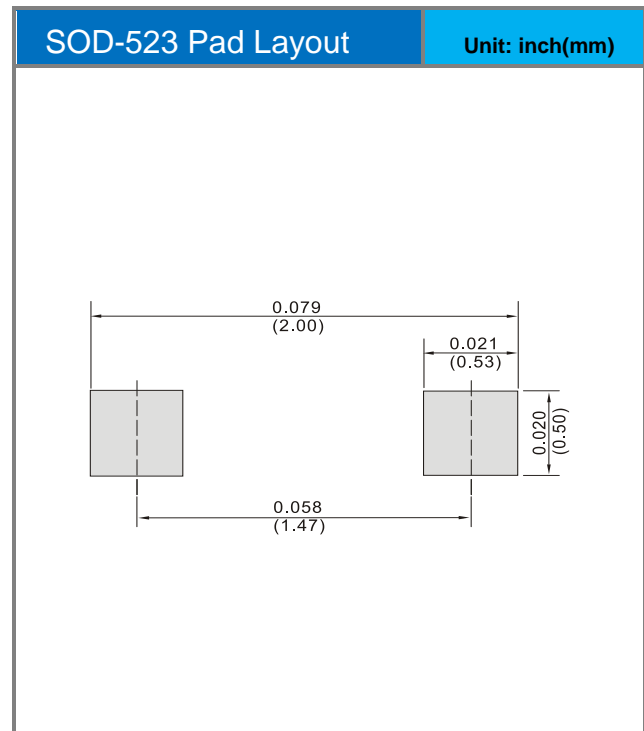
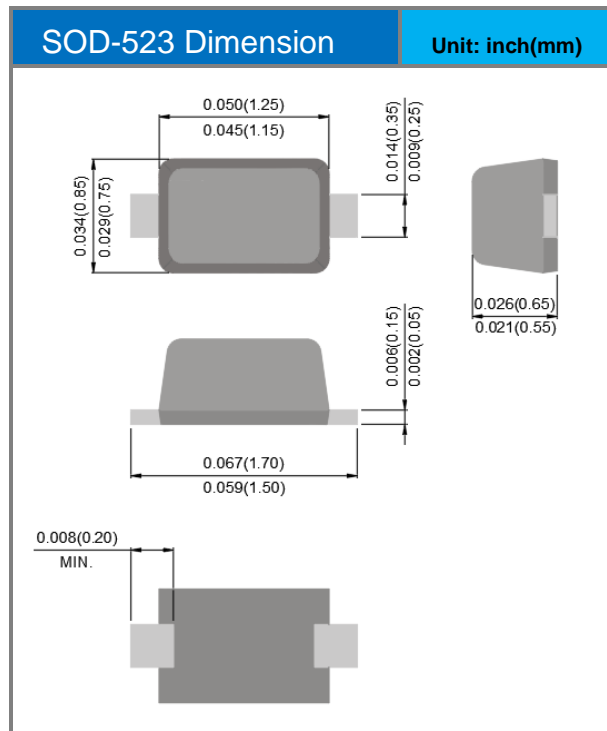


# 1SS400-AU

**Part No. Packing Code Version**

Part No. Packing Code	Package Type	Packing Type	Marking	Version
1SS400-AU_R1_000A1	SOD-523	5K pcs / 7" reel	14	Halogen free RoHS compliant

**Packaging Information & Mounting Pad Layout**





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