



1SS400-AU

Surface Mount Switching Diodes

Voltage 90 V **Power** 175 mW

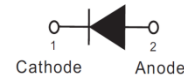
Features

- 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: 0.00005 ounces, 0.0014 grams

SOD-523



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Reverse Voltage	V _R	80	V
Peak Reverse Voltage	V _{RM}	90	V
Maximum Average Forward Current	I _{F(AV)}	225	mA
Non-repetitive Peak Forward Current	I _{FSM}	4	A
	tp = 0.001 ms		
Power Dissipation ^(Note 1)	P _D	175	mW
Typical Junction Capacitance	C _J	1	pF
Measured at 1 MHz And Applied V _R = 0 V			
Typical Thermal Resistance ^(Note 1)	R _{θJA}	710	°C/W
Operating Junction Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-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	μA
Maximum Reverse Recovery Time ^(Note 2)	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

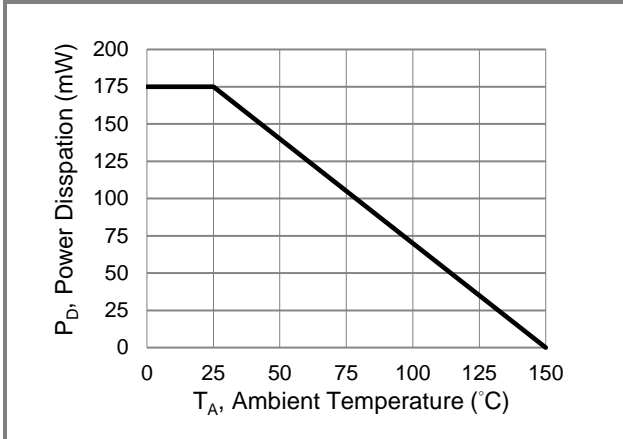


Fig.1 Power Derating Curve

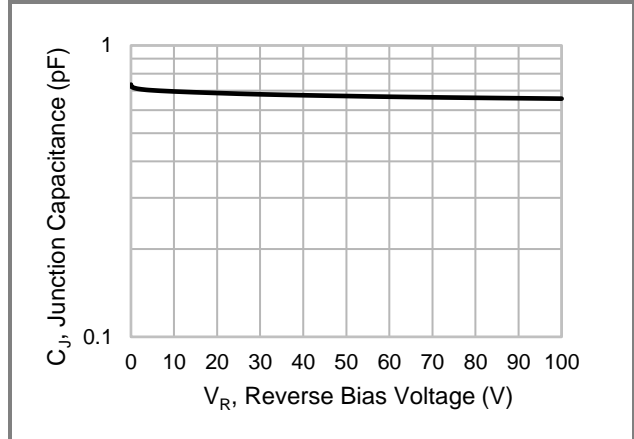


Fig.2 Typical Junction Capacitance

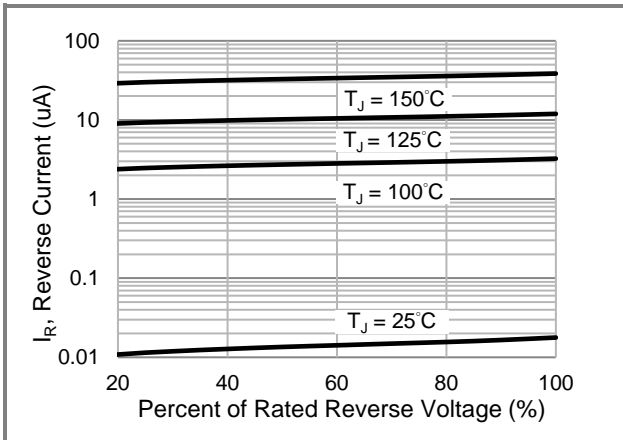


Fig.3 Typical Reverse Characteristics

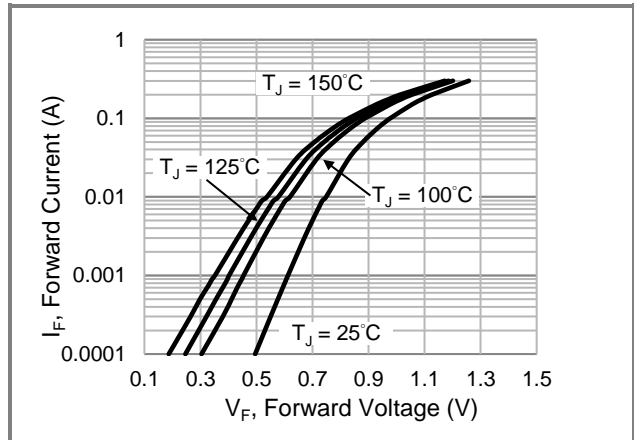


Fig.4 Typical Forward Characteristics

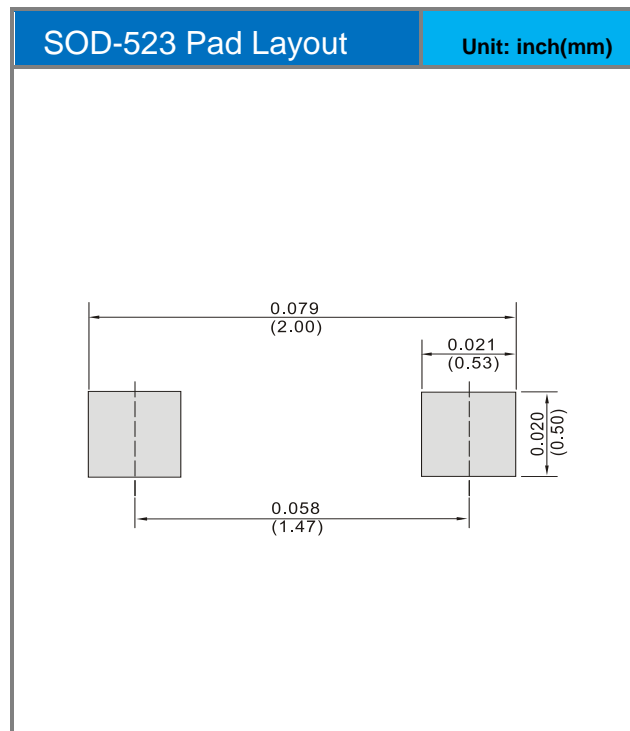
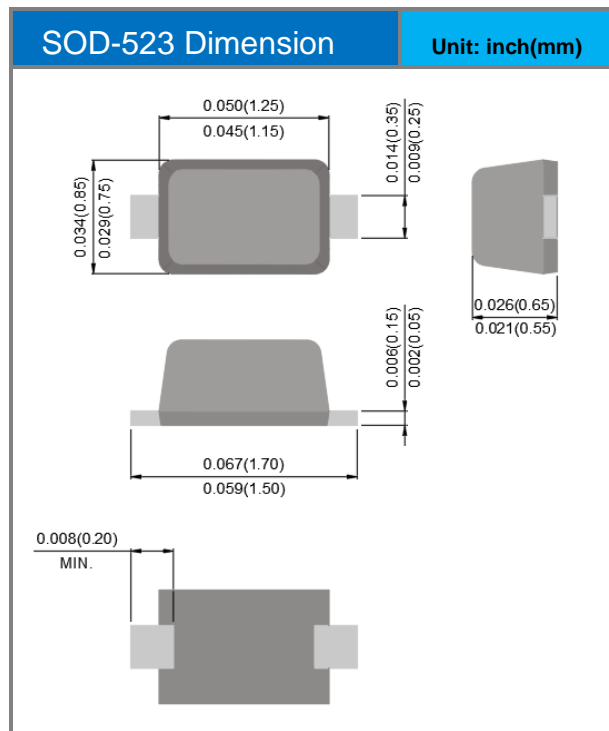


1SS400-AU

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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