



SURFACE MOUNT SWITCHING DIODE

This device is an extremely fast switching diode housed in the ultra-small SOD-523 package. Ideal for applications

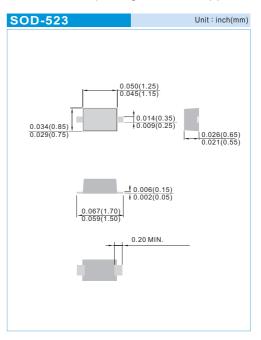
FEATURES

- · Extremely fast reverse recovery time to reduce switching losses
- · Very low capacitance for reduced insertion losses
- · Reverse voltage rating of 80V
- Also available in lead-free plating (100% matte tin finish)
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- · Case: SOD-523, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: See Diagram Below
- Approx.Weight: 0.00€FÁgrams, 0.001I ounces
- Marking: 14



MAXIMUM RATINGS TJ = 25°C UNLESS OTHERWISE NOTED

PARAMETER		LIMITS	UNITS
Peak Reverse Voltage	VRM	90	V
Continuous Reverse Voltage	VR	80	٧
Continuous Forward Current	lF	225	mA
Non-repetitive Peak Forward Current , t = 0.001ms, Square Wave	IFSM	4	Α
Total Power Dissipation (Note1)	P _{tot}	200	mW
Operating Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	°C

Note 1. FR-5 Board 1.0 x 0.75 x 0.062 in

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	LIMITS	UNITS
Thermal Resistance, Junction to Ambient	$R\theta_{JA}$	625	°C/W

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ELECTRICAL CHARACTERISTICS T_J = 25°C UNLESS OTHERWISE NOTED

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Forward Voltage (Note 2)	VF	I F = 100mA	-	-	1.2	V
Reverse Leakage Current	IR	VR = 80V	-	-	0.1	μА
Junction Capacitnace	Сп	0Vdc Bias, f = 1MHz	-	3	-	pF
Reverse Recovery Time (See Figure 1)	l rr	IF = 10mA, IR = 10mA RL = 100 Ohms; measured at I Rrec = 1mA	-	-	4.0	ns

Note 2. Short duration pulse test to avoid self-heating effect

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TYPICAL CHARACTERISTIC CURVES

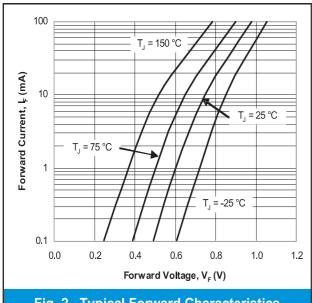


Fig. 2. Typical Forward Characteristics

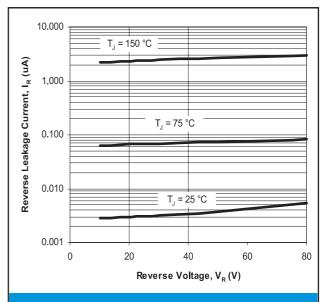
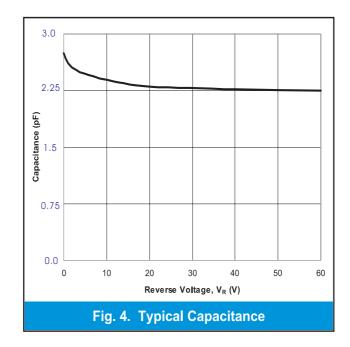


Fig. 3. Typical Reverse Characteristics

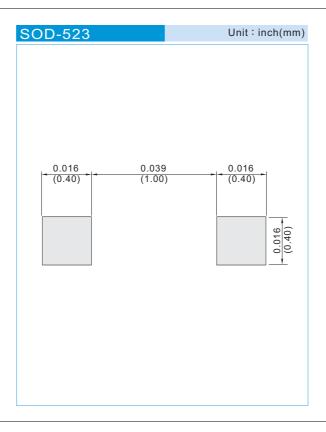


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MOUNTING PAD LAYOUT



ORDER INFORMATION

Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel

LEGAL STATEMENT

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