

SILICON EPITAXIAL SWITCHING DIODE

1N4148WS

SOD-323
PLASTIC PACKAGE



Marking

1N4148WS= A2 with cathode band

Fast Switching Diode

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	75	V
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Average rectified Current half wave rectification with resistive load $f \geq 50$ Hz	$*I_{F(AV)}$	150	mA
Surge Forward Current $t < 1s$ and $T_j=25^\circ C$	I_{FSM}	350	mA
Power Dissipation @ $T_{amb}=25^\circ C$	$*P_{tot}$	200	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	- 65 to +150	$^\circ C$

THERMAL RESISTANCE

Junction to Ambient in free air	$*R_{th(j-a)}$	650	$^\circ C/W$
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*Valid provided that electrodes are kept at ambient Temperature

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ C$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V_F	$I_F=10mA$		1.0	V
Reverse Current	I_R	$V_R=20V$		25	nA
		$V_R=20V, T_j=150^\circ C$		50	μA
		$V_R=75V$		5.0	μA

DYNAMIC CHARACTERISTICS

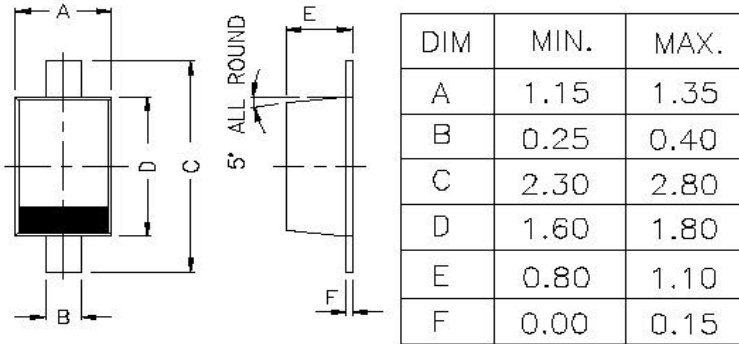
Diode Capacitance	C_d	$V_R=0V, f=1MHz$		4.0	pF
Voltage Rise When Switching On (tested with 50ms pulses)	V_{fr}	tested with=50mA pulses, $t_p=0.1\mu s$, rise time= <30 ns, $t_p= (5$ to 100) KHZ		2.5	ns
Reverse Recovery Time	t_{rr}	$I_F=10mA$, to $I_R=60mA$ $R_L=100 \Omega$ Measured @ $I_R=1mA$		4.0	ns
Rectification Efficiency	η_v	$f=100MHz, V_{RF}=2V$	0.45		

1N4148WSRev140604E

1N4148WS

**SOD-323
PLASTIC PCAKAGE**

PACKAGE SOD-323 FL



All dimensions are in mm
CATHODE IS MARKED BY BAND

1N4148WSRev140604E

Disclaimer

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