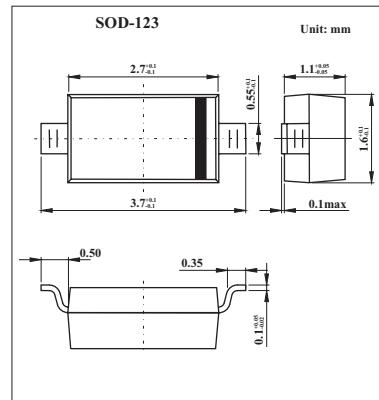


SMALL SIGNAL DIODES

1N4151W

■ Features

- Silicon Epitaxial Planar Diode
- Fast switching diodes.
- This diodes is also available in other case styles including:
the SOD-123 case with the type designation 1N4151W and
the Mini-MELF case with the type designation LL4151.



■ Absolute Maximum Ratings Ta = 25 °C

Paramater	Symbol	Value	Unit
Reverse voltage	V _R	50	V
Peak reverse voltage	V _{RM}	75	V
Rectified current (Average) Half wave rectification with resist.load at Tamb = 25 °C and f ≥ 50Hz	I _o	150 ⁽¹⁾	mA
Surge forward current at t < 1 s and T _j = 25 °C	I _{FSM}	500	mA
Power dissipation at Tamb = 25 °C	P _{tot}	410 ⁽¹⁾	mW
Junction temperature	T _j	150	°C
Storage temperature range	T _s	-65 to +150	°C

NOTES::

(1) Valid provided that electrodes are kept at ambient temperature

SMALL SIGNAL DIODES

1N4151W

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Characteristic	Symbol	Min	Typ	Max	Unit
Forward voltage at $I_F = 50 \text{ mA}$	V_F			1.0	V
Leakage current at $V_R = 50 \text{ V}$	I_R			50	nA
at $V_R = 20 \text{ V}, T_j = 150^\circ\text{C}$	I_R			50	μA
Reverse breakdown voltage Tested with $5 \mu\text{A}$ pulses	$V_{(BR)R}$	75			V
Capacitance at $V_F = V_R = 0 \text{ V}$	C_{tot}			2	pF
Reverse recovery time from $I_F = 10 \text{ mA}$ through $I_R = 10 \text{ mA}$, to $I_R = 1 \text{ mA}$	t_{rr}			4	ns
from $I_F = 10 \text{ mA}$ to $I_R = 1 \text{ mA}$, $V_R = 6 \text{ V}$, $R_L = 100 \Omega$	t_{rr}			2	ns
Thermal Resistance Junction to Ambient Air	R_{thJA}			450 ⁽¹⁾	$^\circ\text{C}/\text{W}$
Rectification Efficiency at $f = 100\text{MHz}$, $V_{RF} = 2 \text{ V}$	η_V	0.45			

NOTES::

(1) Valid provided that electrodes are kept at ambient temperature (SOD-123)