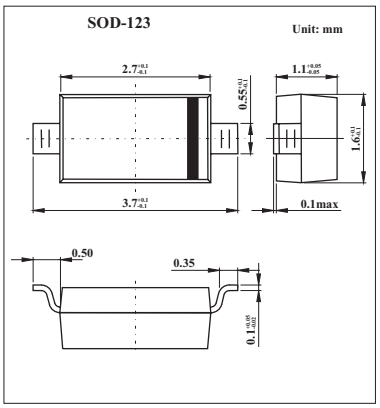
SMALL SIGNAL DIODES

1N4151W



■ Features

- Silicon Epitaxial Planar Diode
- Fast switching diods.
- This diods 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 disignation LL4151.

■ Absolute Maximum Ratings Ta = 25℃

Paramater	Symbol	Value	Unit
Reverse voktage	V_R	50	V
Peak reverse voktage	V_{RM}	75	V
Rectified current (Average) Half wave rectification with resist.load at Tamb = 25 ℃ and f ≥ 50Hz	Io	150(1)	mA
Surge forward current at t < 1 s and T_j = 25 ℃	I_{FSM}	500	mA
Power dissipation at T_{amb} = 25 ℃	P_{tot}	410(1)	mW
Junction temperature	T_j	150	℃
Storage temperature range	Ts	-65 to+150	℃

NOTES::

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

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■ Electrical Characteristics Ta = 25℃

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

NOTES::

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