

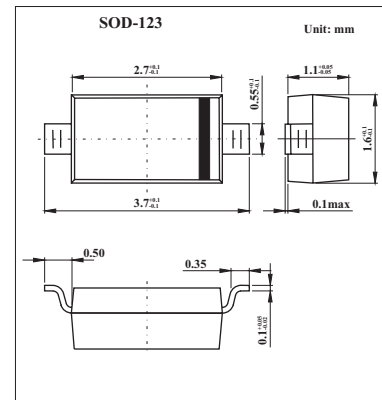


SURFACE MOUNT FAST SWITCHING DIODE

1N4148W

■ Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Non-repetitive peak reverse voltage	V _{RM}	100	V
Peak repetitive reverse voltage	V _{RRM}		
Working peak reverse voltage	V _{RWM}	75	V
DC blocking voltage	V _R		
RMS reverse voltage	V _{R(RMS)}	53	V
Average rectified output current	I _O	150	mA
Forward continuous current	I _{FM}	300	mA
Non-repetitive peak forward surge current @ t = 1.0s	I _{FSM}	1.0	A
@ t = 1.0 us		2.0	
Power dissipation	P _D	400	mW
Typical thermal resistance, junction to ambient air	R _{θJA}	315	°C/W
Junction temperature	T _j	125	°C
Storage temperature	T _{STG}	-65 to 150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Forward voltage	V _{F1}	I _F = 1mA			0.715	V
	V _{F2}	I _F = 10mA			0.855	
	V _{F3}	I _F = 50mA			1.0	
	V _{F4}	I _F = 150mA			1.25	
Peak reverse current	I _{R1}	V _R = 75V			1	μA
	I _{R2}	V _R = 20V			25	μA
Capacitance	C _J	V _R = 0, f = 1.0MHz			2	pF
Reverse recovery time	t _{tr}	I _F =I _R =10mA, I _{tr} =0.1X I _R , R _L =100Ω			4	ns

■ Marking

Marking	T4
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■ Typical Characteristic

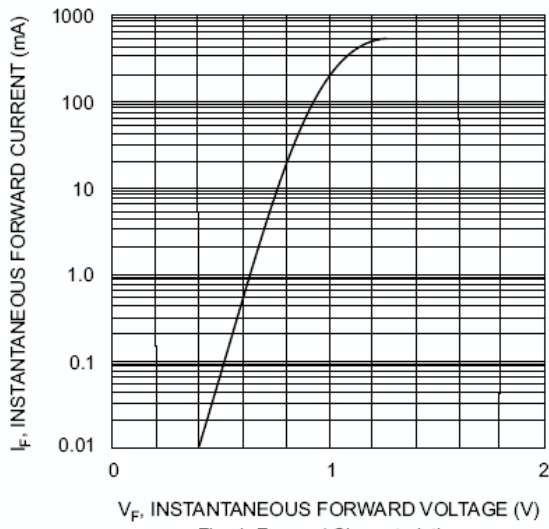


Fig. 1 Forward Characteristics

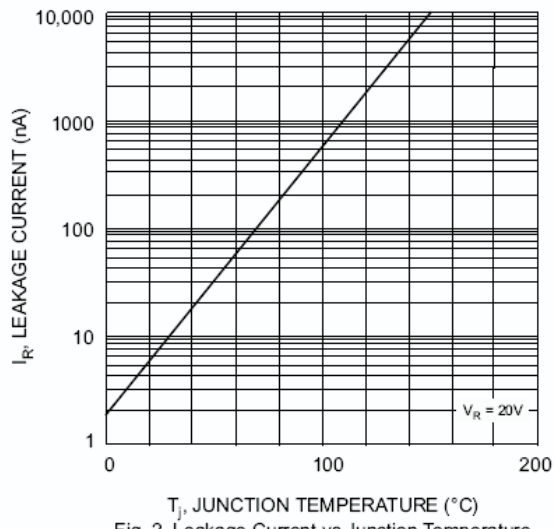


Fig. 2 Leakage Current vs Junction Temperature