

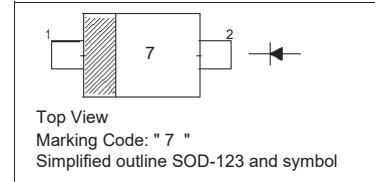
1N4148W HAF Silicon Epitaxial Planar Switching Diode

Features

- Fast Switching Speed
 - Surface Mount Package Ideally Suited for Automatic Insertion
 - For General Purpose Switching Applications
 - High Conductance
- 7RWDOO\ /HDG)UHH)XOO\ 5R+6 &RPSOLDQW
 +DORJHQ DQG \$QWLPRQ\)UHH 3*UHHQ' 'HYLFH

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (T_a = 25°C)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	75	V
Average Rectified Forward Current	I _{F(AV)}	150	mA
Non-repetitive Peak Forward Surge Current at t = 1 μs	I _{FSM}	2	A
Power Dissipation	P _{tot}	400	mW
Thermal Resistance from Junction to Ambient Air	R _{θJA}	31	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

Characteristics at T_a = 25°C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	V _{(BR)R}	75	-	V
Forward Voltage at I _F = 1 mA at I _F = 10 mA at I _F = 50 mA at I _F = 150 mA	V _F	- - - -	0.715 0.855 1 1.25	V
Peak Reverse Current at V _R = 75 V at V _R = 20 V at V _R = 75 V, T _J = 150°C at V _R = 25 V, T _J = 150°C	I _R	- - - -	1 25 50 30	μA nA μA μA
Total Capacitance at V _R = 0 V, f = 1 MHz	C _T	-	2	pF
Reverse Recovery Time at I _{rr} = 0.1 X I _R , I _F = I _R = 10 mA, R _L = 100 Ω	t _{rr}	-	4	ns

Typical Characteristics

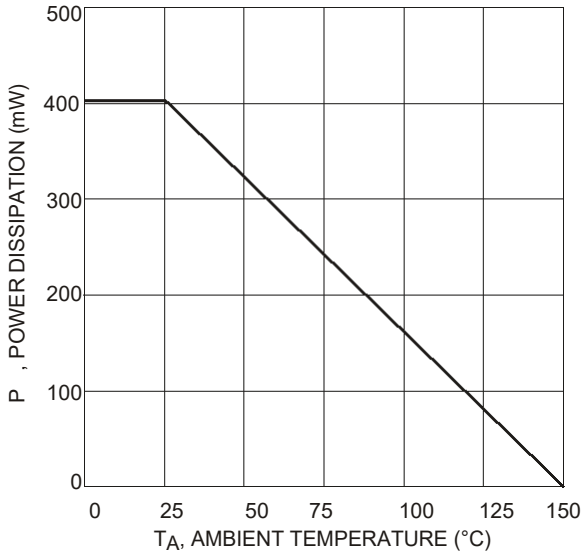


Fig. 1 Power Derating Curve

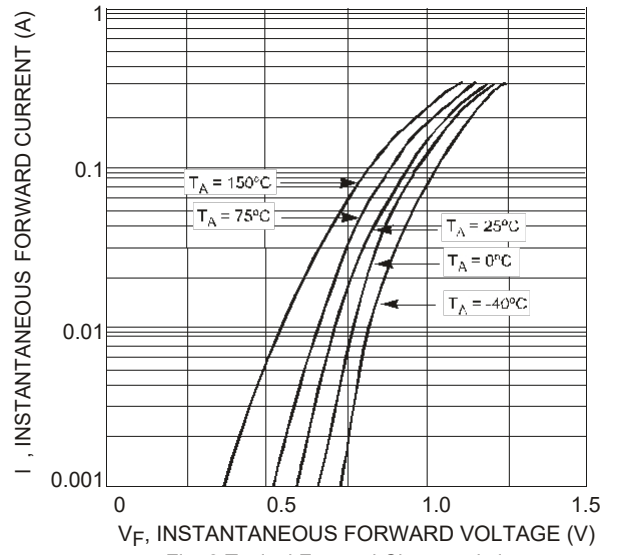


Fig. 2 Typical Forward Characteristics

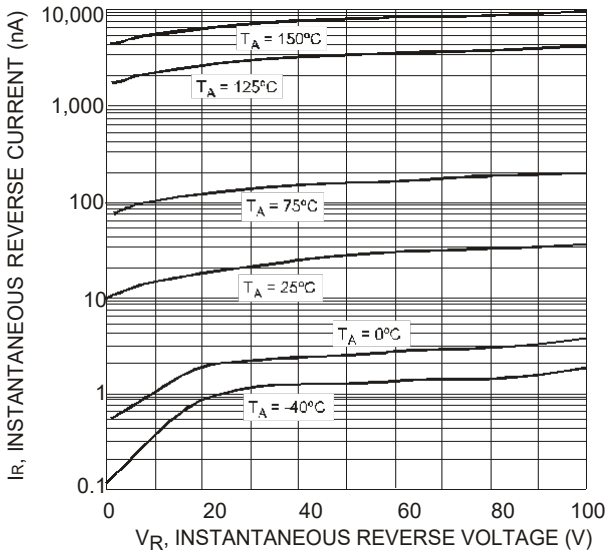


Fig. 3 Typical Reverse Characteristics

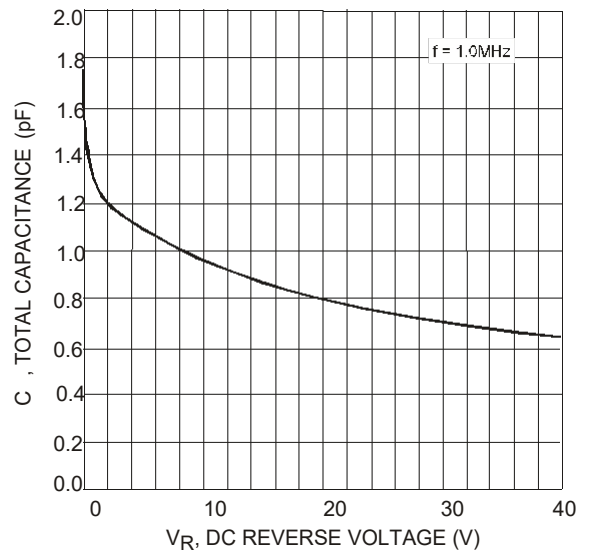
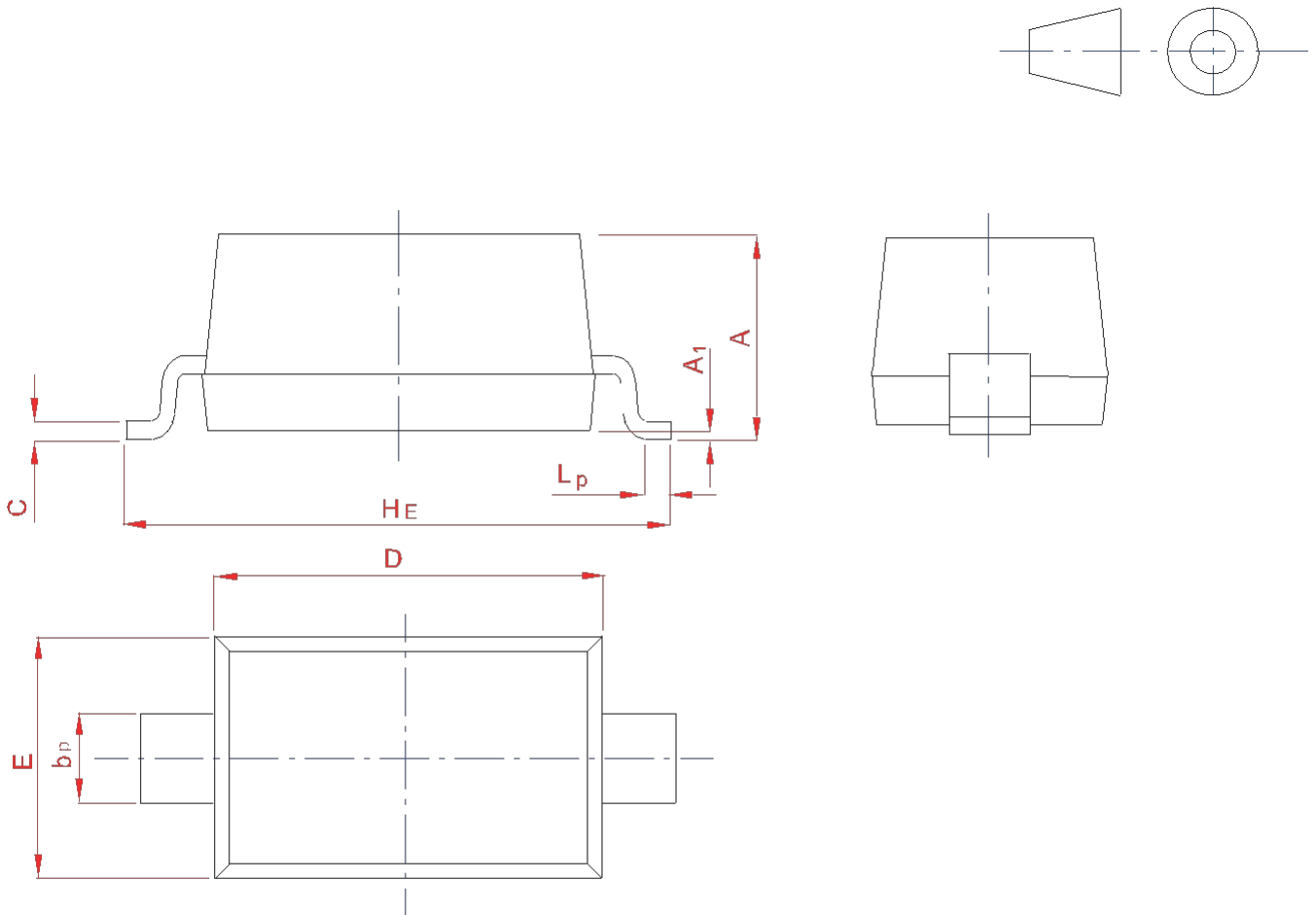


Fig. 4 Total Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD 123



UNIT	A	b _p	C	D	E	HE	A ₁	L _p
mm	1.20	0.60	0.135	2.75	1.65	3.85	0.10	0.50
	0.90	0.50	0.100	2.55	1.55	3.55	0.01	0.20