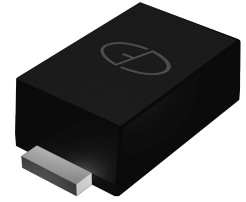


Features

- Small Surface Mount Package
- High Breakdown Voltage
- Fast Speed Switching



SOD-123

Applications

- High Speed Switching and Reverse Polarity Protection
- High Speed Rectifying Applications
- Consumer, Automotive and Telecommunication Industry

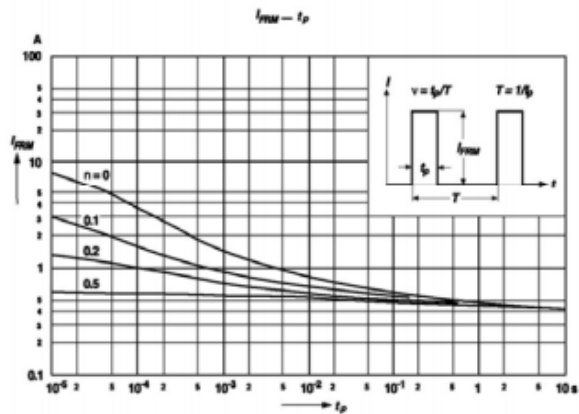
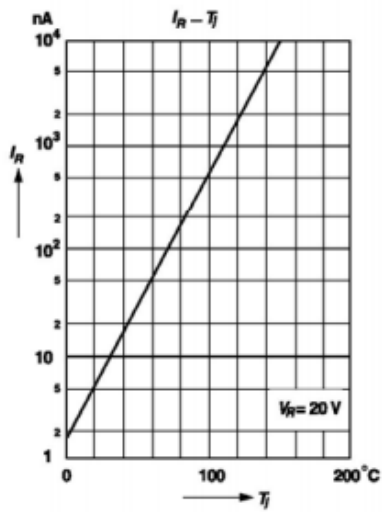
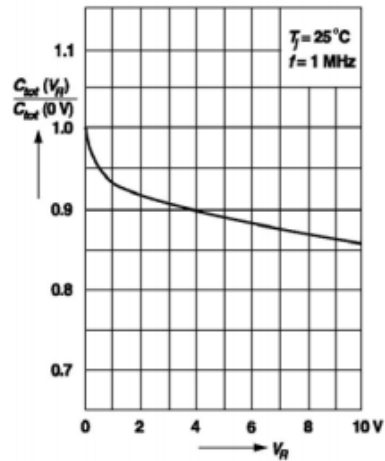
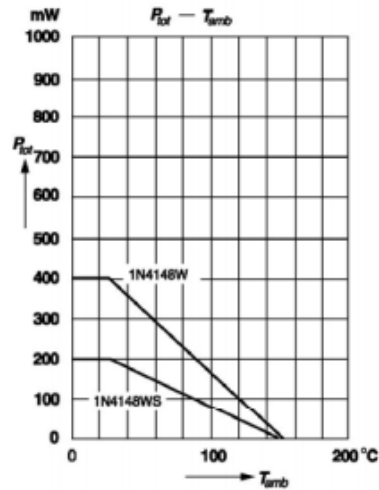
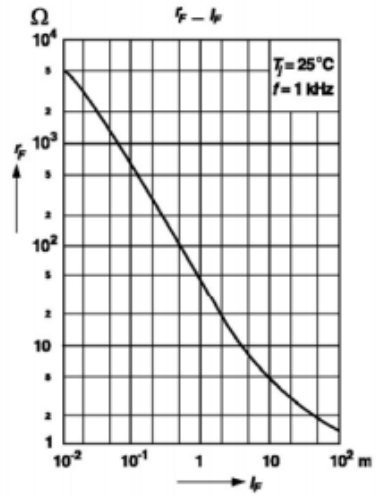
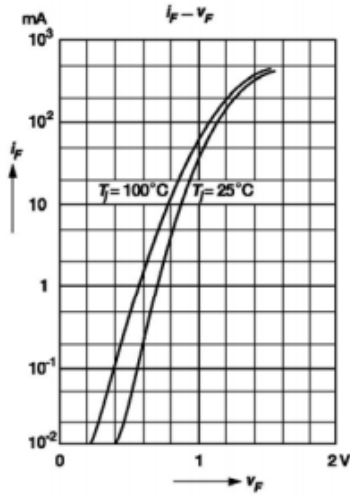
Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Rating	UNIT
Peak Repetitive Reverse Voltage	V _R	75	V
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Average Rectified Output Current	I _O	150	mA
Forward Continuous Current	I _{FM}	300	mA
Non-Repetitive Peak Forward Surge Current	I _{FSM} (t=1.0us)	2.0	A
	I _{FSM} (t=1.0s)	1.0	
Power Dissipation	P _{TOT}	400	mW
Thermal Resistance Junction to Ambient	R _{thja}	650	°C/W
Operating Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	-55 ~ 150	°C

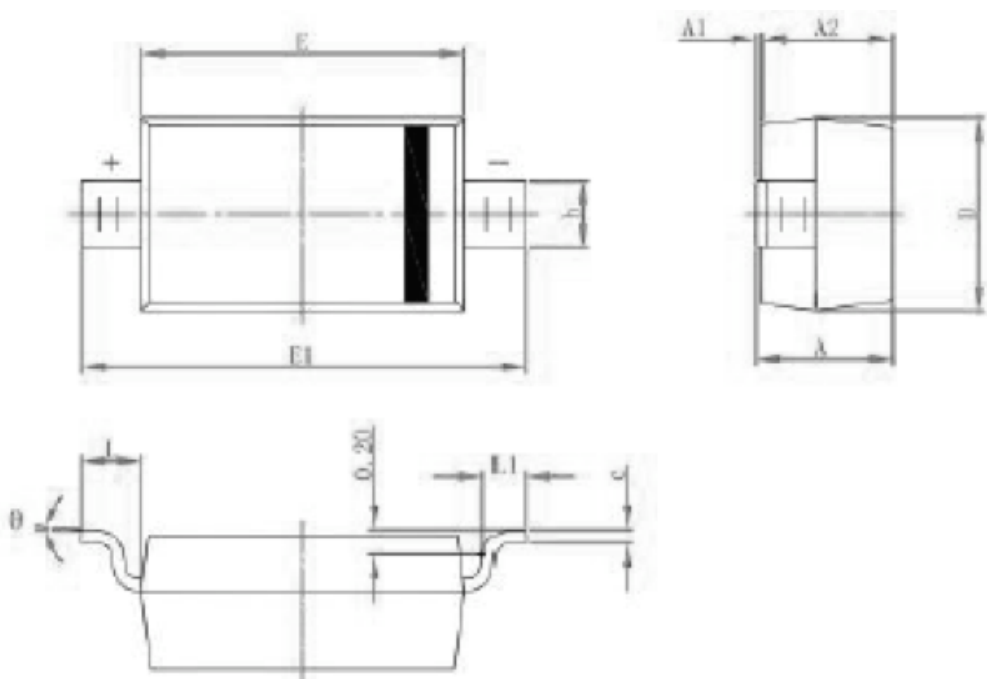
Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Condition.	Min.	Max.	Unit
Reverse Breakdown Voltage	V _{(BR)R}	I _R =1.0uA	75		V
Forward Voltage	V _F	I _F =10mA		1.0	V
Reverse Current	I _R	V _R =75V		5.0	uA
		V _R =20V		25	nA
		V _R =20V, T _J =150°C		50	uA
Capacitance between terminals	C _T	V _R =0, f=1.0MHz		4.0	pF
Reverse Recovery Time	T _{RR}	I _F =10mA, V _R =6.0V, I _R =1mA, R _L =100Ω		4.0	ns

Typical Electrical Characteristic Curves



Package Outline Dimensions SOD-123 (in mm)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF.		0.020 REF.	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

Marking and Ordering Information

Device	Package	Carrier	Quantity	Marking
1N4148W	SOD-123	Tape & Reel	3,000pcs / Reel	A2