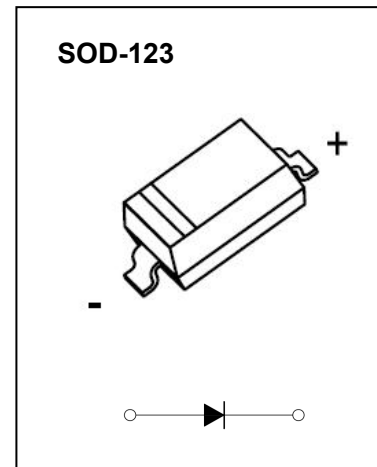


FAST SWITCHING DIODE

FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- AEC-Q101 qualified (Automotive grade with suffix "Q".)
- Exsemi technology



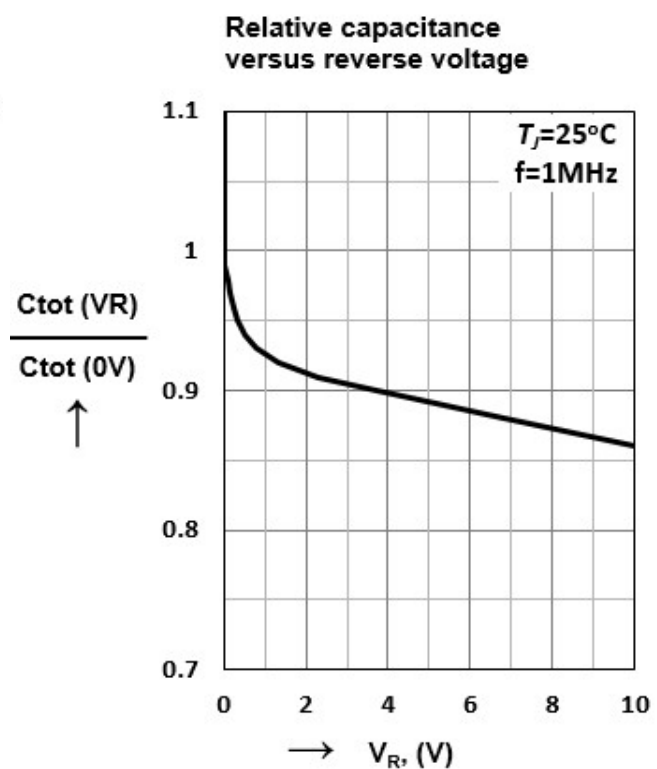
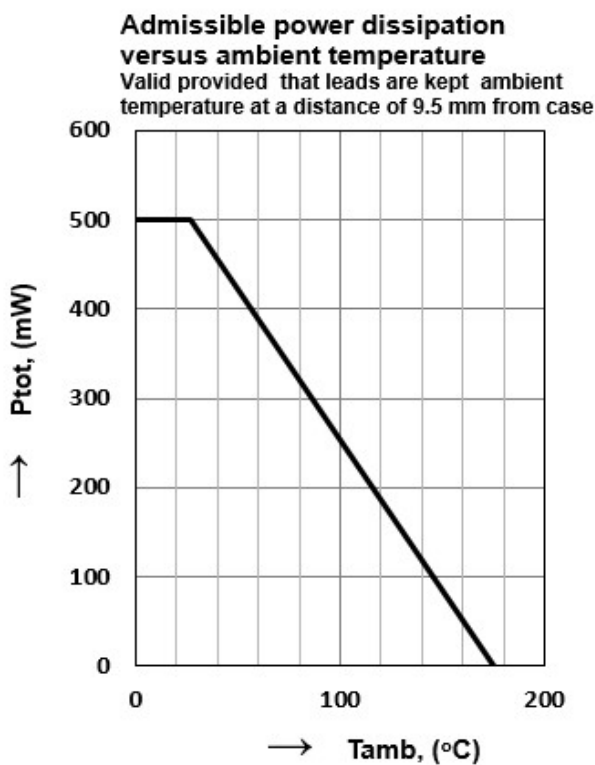
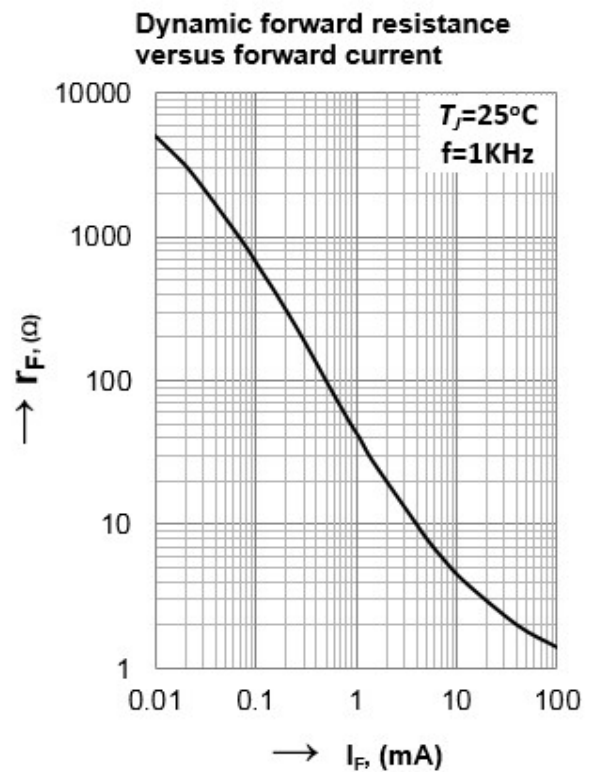
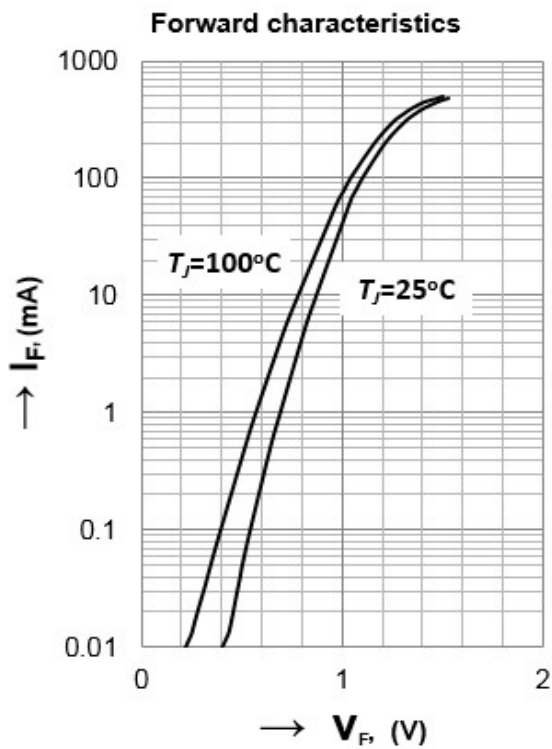
Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25°C

Parameter	Symbol	Value	Unit
Peak reverse voltage	V _{RM}	50	Volts
Maximum average rectified current	I _{F(AV)}	200	mA
Maximum power dissipation at T _{amb} =25°C	P _{tot}	500	mW
Maximum junction temperature	T _J	175	°C

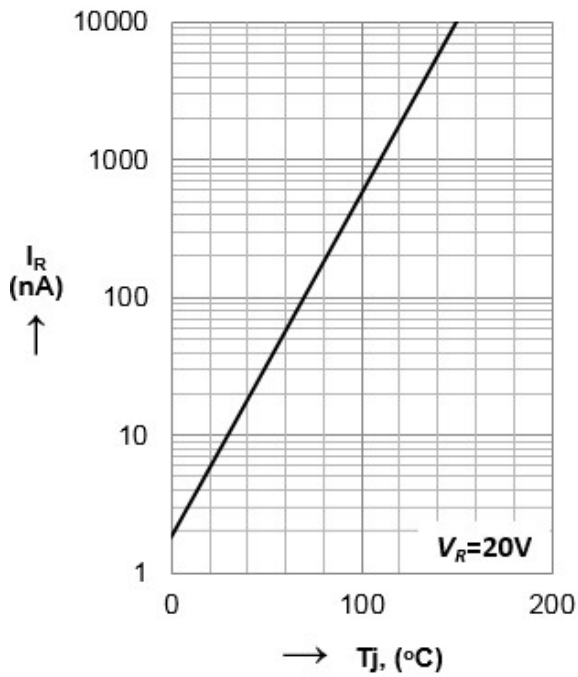
Electrical Ratings @T_a=25°C

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage drop	V _F	I _F =200mA	-	-	1	Volt
Reverse current	I _R	VR=50V	-	-	100	uA
Reverse recovery time	t _{rr}	I _F =I _R =10mA to 200mA to 0.1I _F	-	-	4	ns

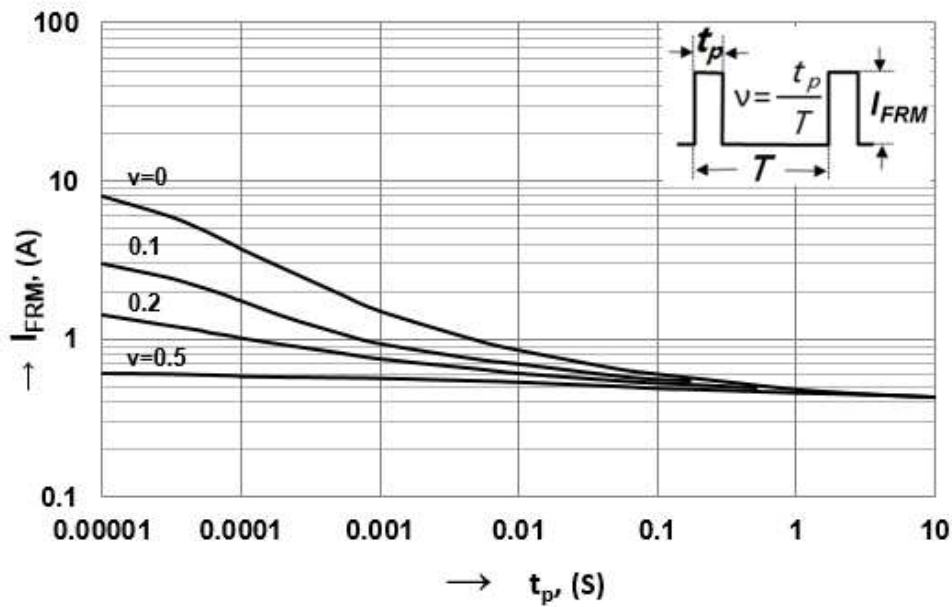
Typical Characteristics



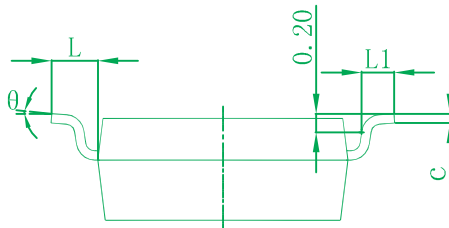
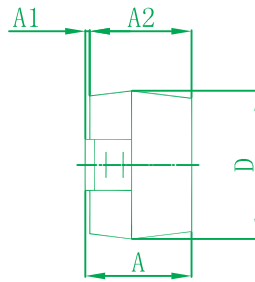
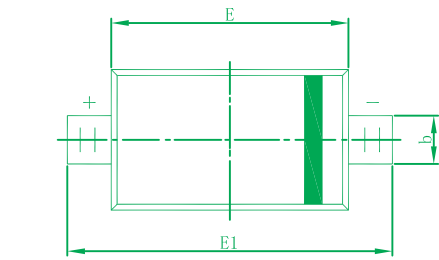
Leakage current versus junction temperature



Admissible repetitive peak forward current versus pulse duration
For conditions, see footnote in table "Absolute Maximum Ratings"

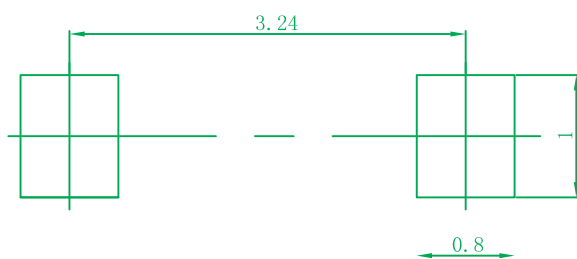


SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.250	0.035	0.049
A1	0.000	0.100	0.000	0.004
A2	0.900	1.150	0.035	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°

SOD-123 Suggested Pad Layout

**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

Ordering information

Device	Package	Shipping
1N4150W	SOD-123	3000/Tape&Reel(7inches)