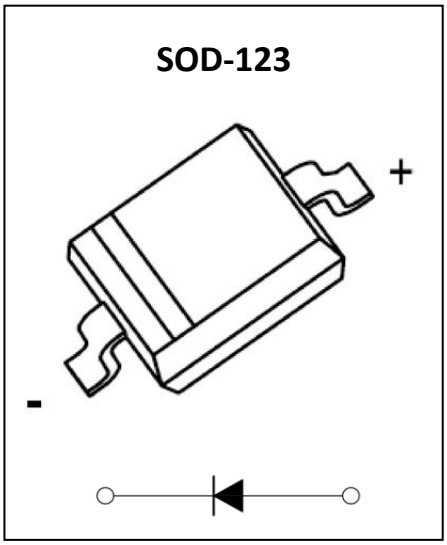
1N4148W

75V-0.15A Fast Switching Diodes

1N4148W Fast Switching Diodes



Feature

- V_R 75V
- I_{FAV} 150mA

Application

- Extreme fast switches

MARKING:

ABSOLUTE MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

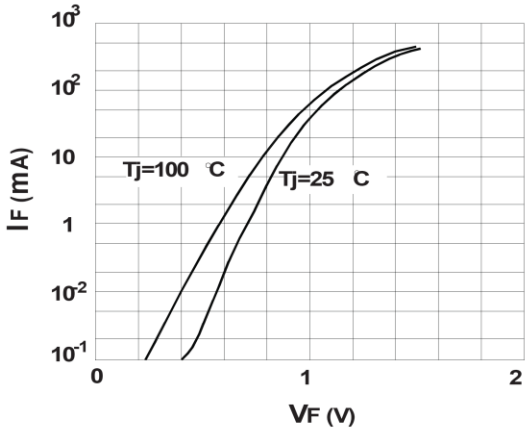
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Average rectified output current	I_O	0.15	A
Forward continuous current	I_{FM}	0.30	A
Non-repetitive Peak Forward Surge Current @ t=1 us	I_{FSM}	2	A
Non-repetitive Peak Forward Surge Current @ t=1 s		1	A
Power Dissipation	P_D	0.4	W
Junction Temperature	T_J	125	℃
Storage Temperature	T_{STG}	-65 ~ +150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise noted)

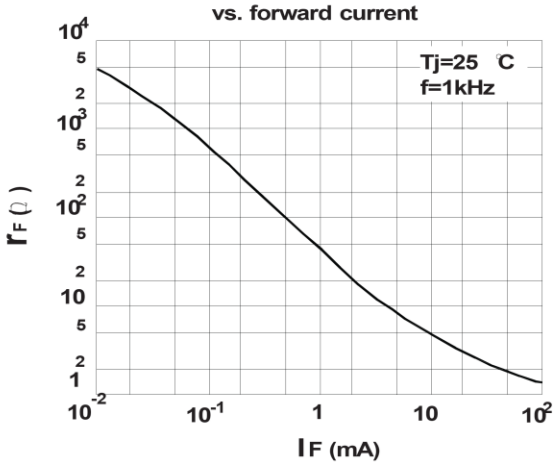
Parameter	Symbol	Test Condition	Min	Max	Unit
Forward voltage	V_F	I_F =1mA		0.715	V
		I_F =10mA		0.855	V
		I_F =50mA		1.0	V
		I_F =150mA		1.25	V
Reverse current	I_R	V_R =20V		25	nA
		V_R =75V		1	μA
Diode capacitance	C_D	VR=0V, f=1MHz		2	pF
Reverse Recovery Time	trr	IF=IR=10mA，I_{rr}=0.1*IR, RL=100Ω		4	ns

Typical Electrical and Thermal Characteristics

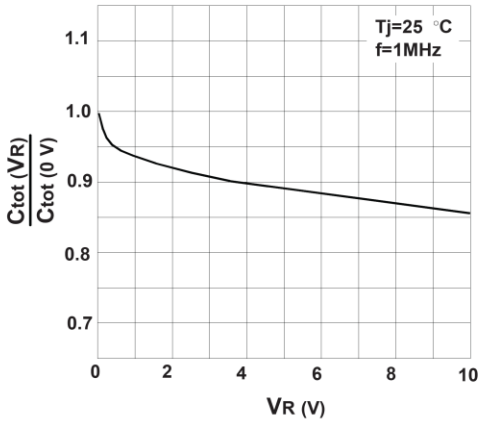
Forward characteristics



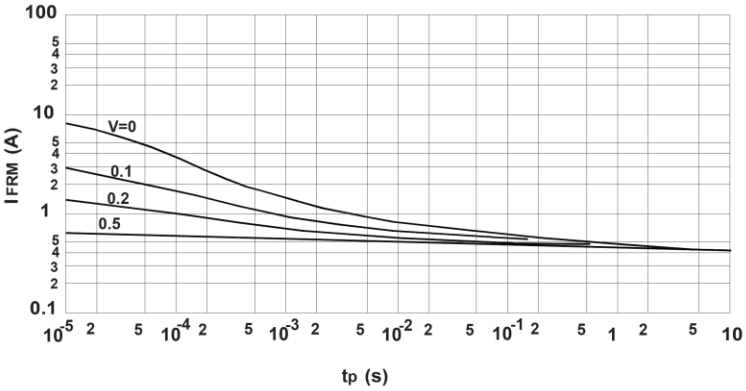
Dynamic forward resistance vs. forward current



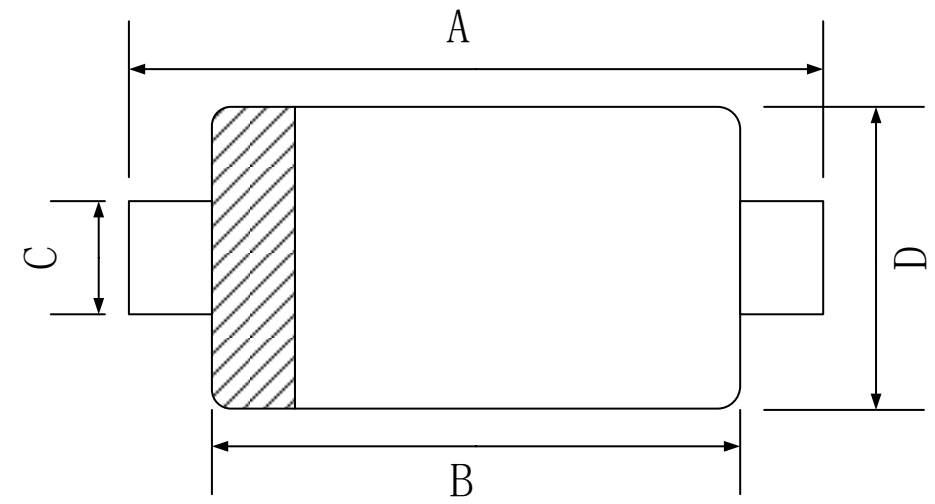
Reverse capacitance vs. reverse voltage

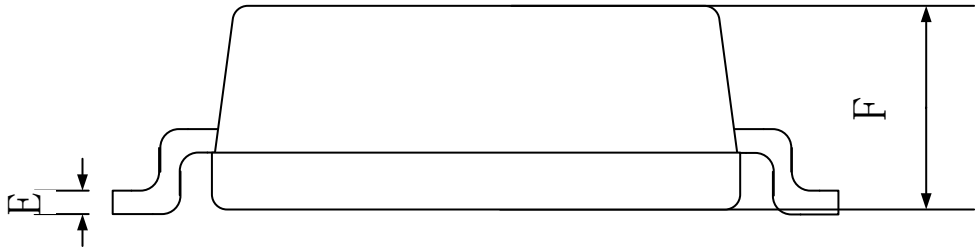


Amissible repetitive peak forward current vs. pulse duration



SOD-123 Package Outline Dimensions





Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	3.45	3.65	3.85
B	2.55	2.65	2.75
C	0.45	0.55	0.65
D	1.50	1.60	1.70
E	0.09	0.105	0.12
F	0.95	1.15	1.35