

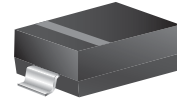
Switching Diode

CDSW914-G (RoHS Device)

Reverse Voltage: 100 Volts
Forward Current: 200 mAmp

Features:

- SOD-123 Surface Mount Package
- High Breakdown Voltage
- Fast Speed Switching Time
- Pb-Free Packages Are Available

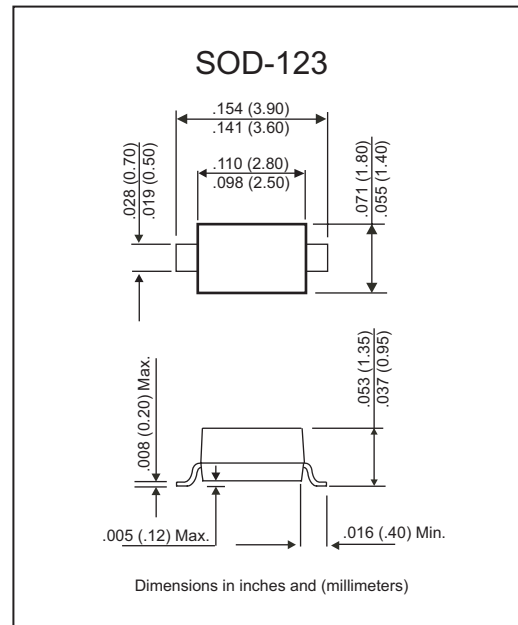


Max. Ratings:

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	100	V _{dc}
Peak Forward Current	I_F	200	mA _{dc}
Peak Forward Surge Current	$I_{FM (surge)}$	500	mA _{dc}
Non-repetitive Peak Forward Surge Current	I_{FSM}		
Pulse Width = 1 second		1.0	A
Pulse Width = 1 micro second		2.0	A

Thermal Characteristics:

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board (FR-5 = 1.0oz Cu, 1.0in ² pad) TA = 25°C	P_D	425	mW
Derate above 25°C		3.4	mW/°C
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	290	°C/W



Electrical Characteristics: (TA=25°C unless otherwise noted)

Characteristic	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage ($I_{BR} = 100 \mu\text{A}$)	$V_{(BR)}$	100	—	V _{dc}
Reverse Voltage Leakage Current ($V_R = 20 \text{ Vdc}$) ($V_R = 75 \text{ Vdc}$)	I_R	—	25 5.0	nA _{dc} μA _{dc}
Forward Voltage ($I_F = 10 \text{ mA}$)	V_F	—	1000	mV _{dc}
Diode Capacitance ($V_R = 0 \text{ Vdc}$, $f = 1.0 \text{ MHz}$)	C_D	—	4.0	pF
Reverse Recovery Time ($I_F = I_R = 10 \text{ mA}$) (Figure 1)	T_{rr}	—	4.0	nS

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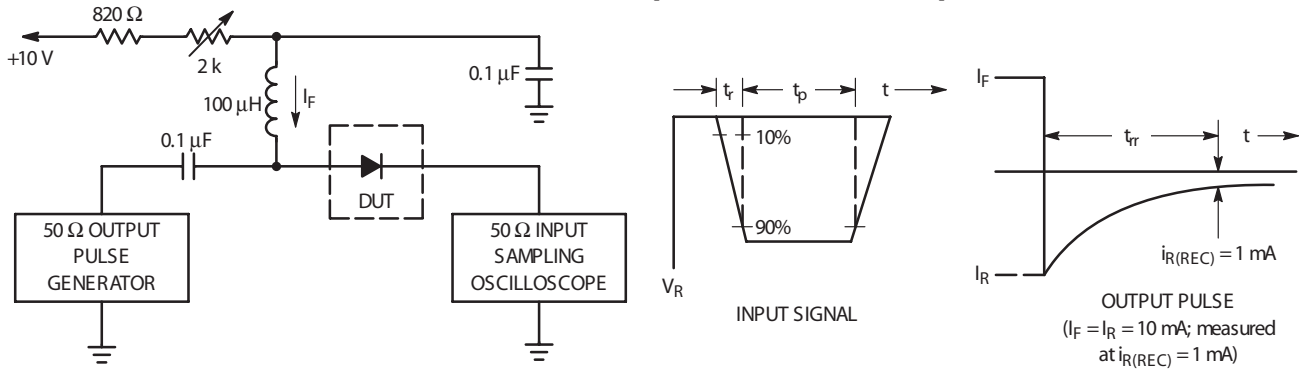


Figure 1. Recovery Time Equivalent Test Circuit

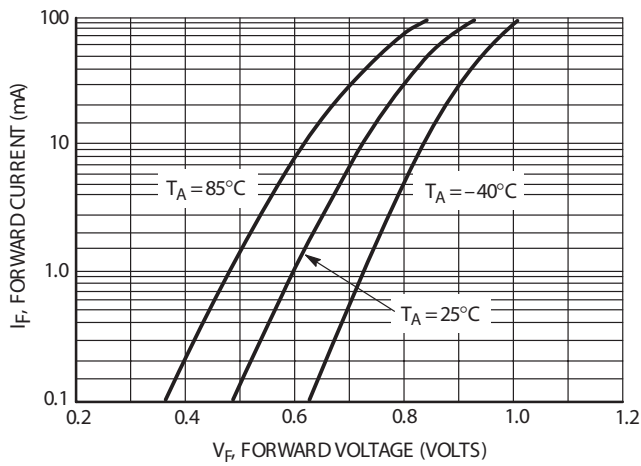


Figure 2. Forward Voltage

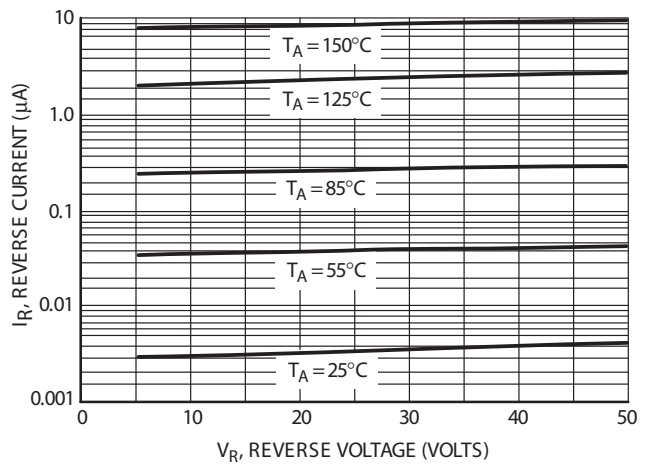


Figure 3. Leakage Current

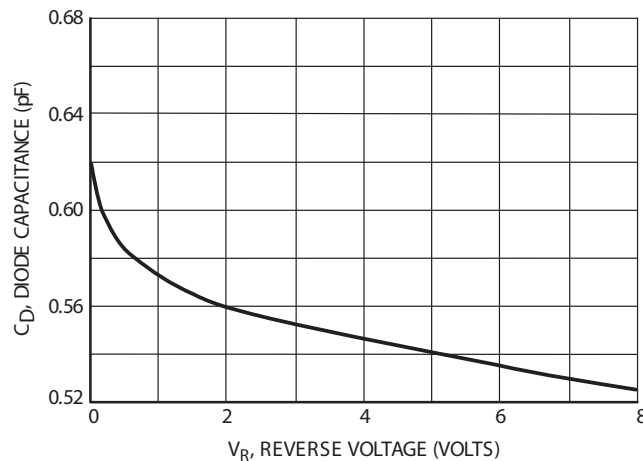


Figure 4. Capacitance