

# SMD Switching Diode



SMD Diodes Specialist

## CDSW19-G/20-G/21-G

High Speed  
RoHS Device  
Features



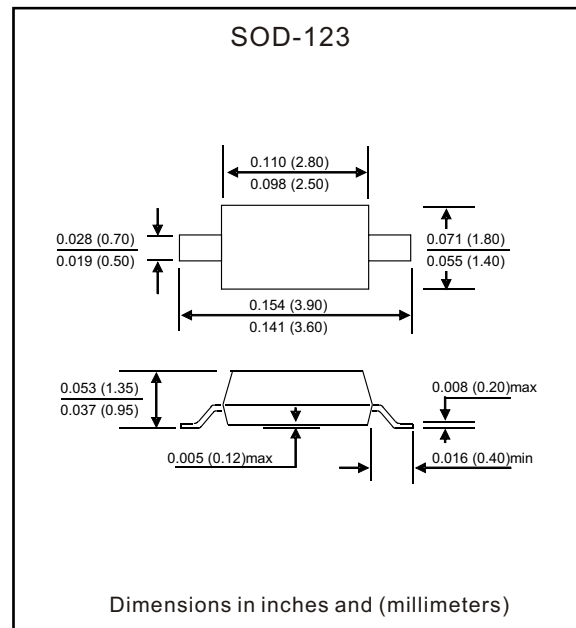
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications

### Mechanical data

Case: SOD-123, Molded Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Weight: 0.01 gram(approx.).



### Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Symbol	CDSW19-G	CDSW20-G	CDSW21-G	Unit
Non-Repetitive peak reverse voltage	V <sub>RM</sub>	120	200	250	V
Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	V <sub>RRM</sub> V <sub>VRWM</sub> V <sub>R</sub>	100	150	200	V
RMS reverse voltage	V <sub>R(RMS)</sub>	71	106	141	V
Forward continuous current	I <sub>FM</sub>	400			mA
Average rectified output current	I <sub>o</sub>	200			mA
Peak forward surge current @1.0mS @1.0S	I <sub>FSM</sub>	2.5 0.5			A
Repetitive peak forward current	I <sub>FRM</sub>	625			mA
Power dissipation	P <sub>D</sub>	250			mW
Thermal Resistance (Junction to ambient)	R <sub>θJA</sub>	500			°C/W
Storage temperature	T <sub>STG</sub>	-65 ~ +150			°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I <sub>F</sub> = 0.1 A I <sub>F</sub> = 0.2 A	V <sub>F</sub>			1.0 1.25	V
Reverse current	CDSW19-G V <sub>R</sub> =100 V CDSW20-G V <sub>R</sub> =150 V CDSW21-G V <sub>R</sub> =200 V	I <sub>R</sub>			0.1 0.1 0.1	uA
Capacitance between terminals	f = 1 MHz, V <sub>R</sub> =0V	C <sub>T</sub>			5	pF
Reverse recovery time	I <sub>F</sub> = I <sub>R</sub> =30 mA, R <sub>L</sub> =100 Ω, I <sub>rr</sub> = 0.1 X I <sub>R</sub>	t <sub>RR</sub>			50	nS

REV:A

## Typical Characteristics (CDSW19-G/20-G/21-G)

Fig. 1 - Forward Characteristics

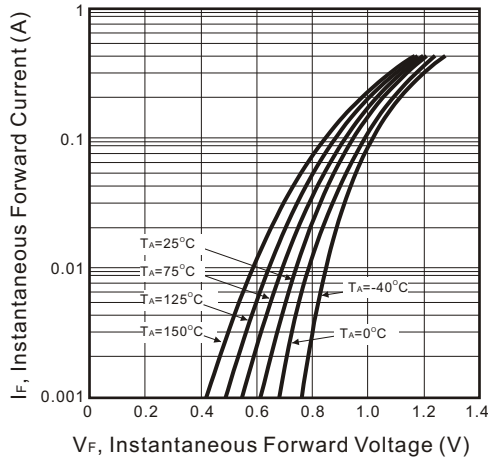


Fig. 2 - Typical Reverse Characteristics

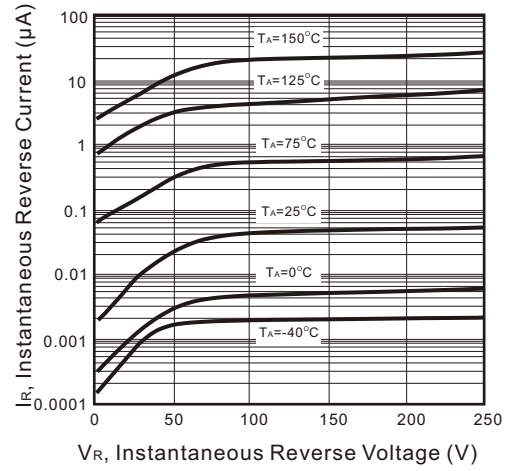


Fig. 3 - Power Derating Curve

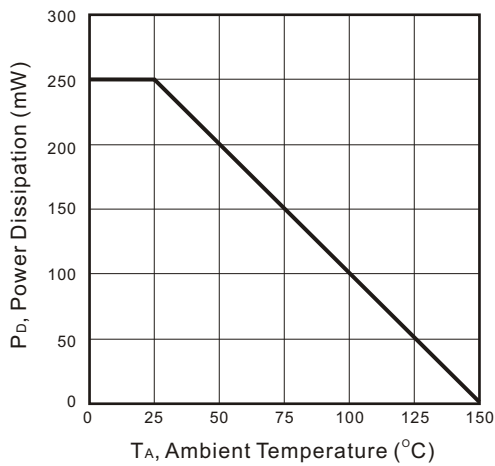


Fig. 4 - Typical Capacitance V.S. Reverse Voltage

