

SMD Switching Diode



SMD Diodes Specialist

CDSW19-G/20-G/21-G

High Speed
RoHS Device

Features

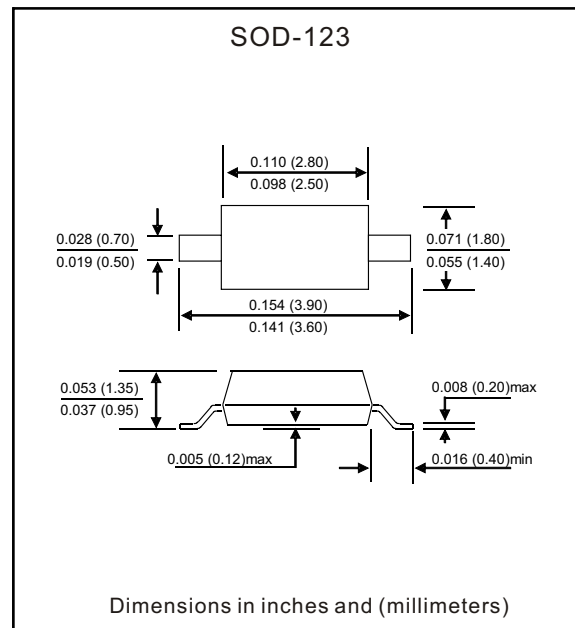
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications

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 _{RM}	120	200	250	V
Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	V _{RRM} V _{RWM} V _R	100	150	200	V
RMS reverse voltage	V _{R(RMS)}	71	106	141	V
Forward continuous current	I _{FM}	400			mA
Average rectified output current	I _o	200			mA
Peak forward surge current @1.0mS @1.0S	I _{FSM}	2.5 0.5			A
Repetitive peak forward current	I _{FRM}	625			mA
Power dissipation	P _D	250			mW
Thermal Resistance (Junction to ambient)	R _{θJA}	500			°C/W
Storage temperature	T _{STG}	-65 ~ +150			°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 0.1 A I _F = 0.2 A	V _F			1.0 1.25	V
Reverse current	CDSW19-G V _R =100 V CDSW20-G V _R =150 V CDSW21-G V _R =200 V	I _R			0.1 0.1 0.1	uA
Capacitance between terminals	f = 1 MHz, V _R =0V	C _T			5	pF
Reverse recovery time	I _F = I _R =30 mA, R _L =100 Ω, I _{rr} = 0.1 X I _R	t _{RR}			50	nS

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

Fig. 1 - Forward Characteristics

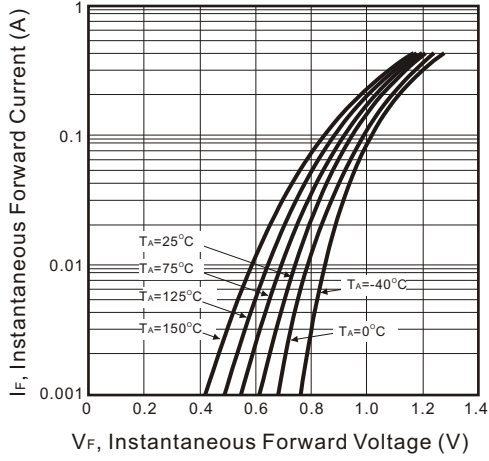


Fig. 2 - Typical Reverse Characteristics

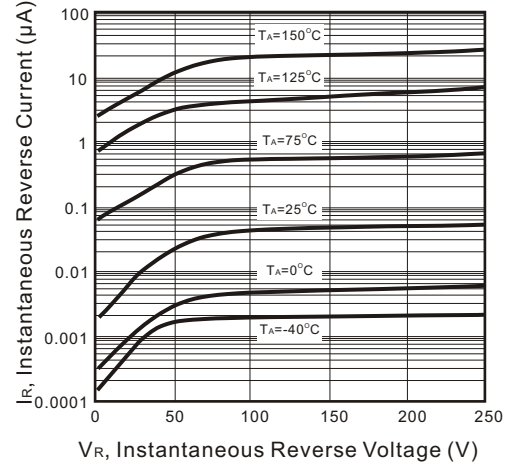


Fig. 3 - Power Derating Curve

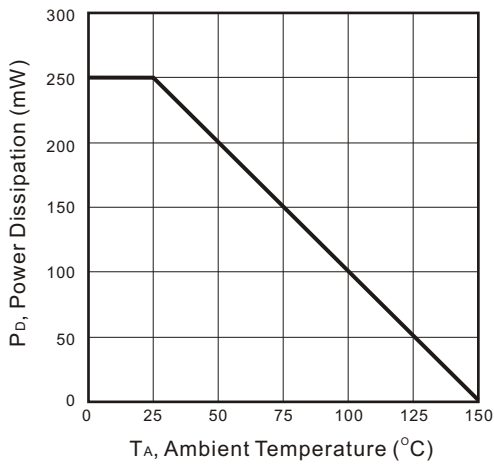


Fig. 4 - Typical Capacitance V.S. Reverse Voltage

