



CDSW19-G/20-G/21-G

High Speed
RoHS Device

Features

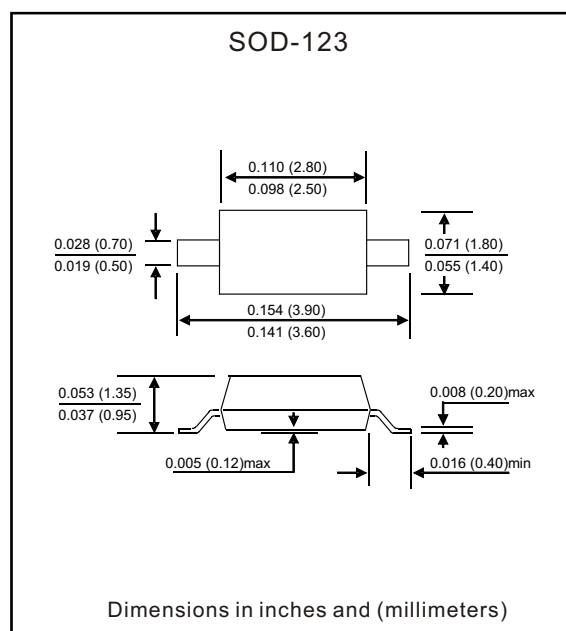
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications

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)	$R_{\theta JA}$	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 CDSW20-G CDSW21-G	$V_R = 100 V$ $V_R = 150 V$ $V_R = 200 V$	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	$I_F = I_R = 30 mA, R_L = 100 \Omega, I_{rr} = 0.1 \times I_R$	t_{RR}			50	nS

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

Fig. 1 - Forward Characteristics

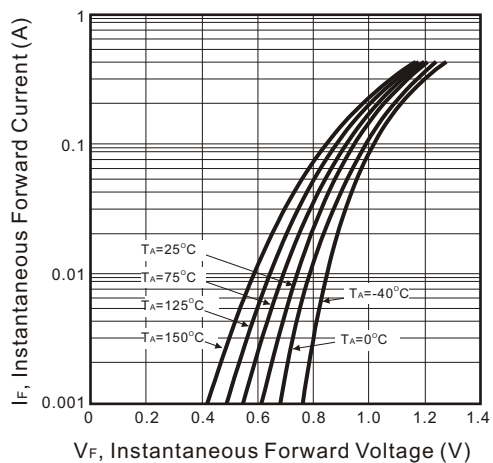


Fig. 2 - Typical Reverse Characteristics

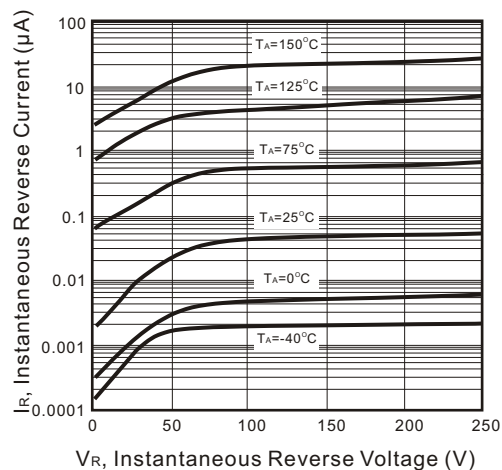


Fig. 3 - Power Derating Curve

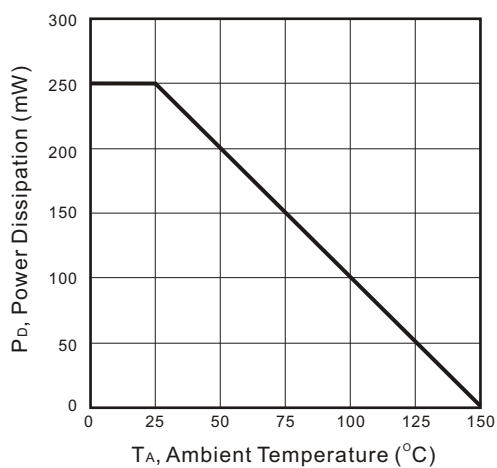


Fig. 4 - Typical Capacitance V.S. Reverse Voltage

