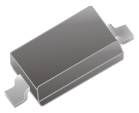
SMD Switching Diode

COMCHIP
SMD Diodes Specialist

CDSV19-G/20-G/21-G

RoHS Device



Features

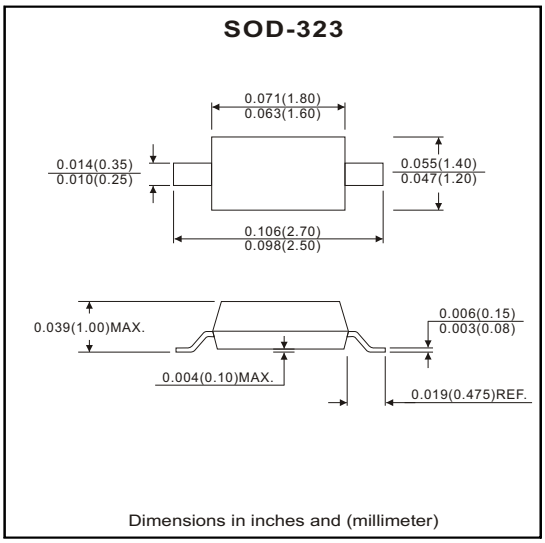
-Fast switching speed.

-Small surface mount type, ideally suited for automatic insertion.

-Low reverse current and low forward voltage.

-High reliability.

-For general purpose switching applications.



Mechanical data

Case: SOD-323, Molded Plastic

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

Weight: 0.01 gram(approx.)

Marking: CDSV19-G:A8
CDSV20-G:T2
CDSV21-G:T3

Maximum Ratings (at Ta=25°C unless otherwise noted)

Parameter	Symbol	CDSV19-G	CDSV20-G	CDSV21-G	Unit
Repetitive peak reverse voltage	V_{RRM}	120	200	250	V
Working peak reverse voltage DC blocking voltage	V_{RWM} V_R	100	150	200	V
RMS reverse voltage	$V_{R(RMS)}$	71	106	141	V
Forward continuous current (Note 1)	I_{FM}	400			mA
Average rectified output current (Note 1)	I_O	200			mA
Non-repetitive peak forward surge current @t=1.0uS @t=1.0S	I_{FSM}	2.5 0.5			A
Repetitive peak forward surge current	I_{FRM}	625			mA
Power dissipation	P_D	200			mW
Thermal resistance junction to ambient air (Note 1)	$R_{\theta JA}$	625			°C/W
Operating and storage temperature range	T_J,T_{STG}	-65 ~ +150			°C

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

Parameter	Symbol	Conditions	Min	Typ.	Max	Unit
Forward voltage	V_F	I_F=100mA I_F=200mA	-----	-----	1.0 1.25	V
Peak reverse current @Rated DC blocking voltage	I_R	T_J=25°C T_J=100°C	-----	-----	100 15	nA μA
Junction capacitance	C_T	V_R=0V, f=1.0MHz	-----	-----	5.0	pF
Reverse recovery time	t_{rr}	I_F=I_R=30mA, I_{rr}=0.1I_R, R_L=100Ω	-----	-----	50	nS

RATING AND CHARACTERISTIC CURVES (CDSV19-G/20-G/21-G)

Fig.1 Forward Characteristics

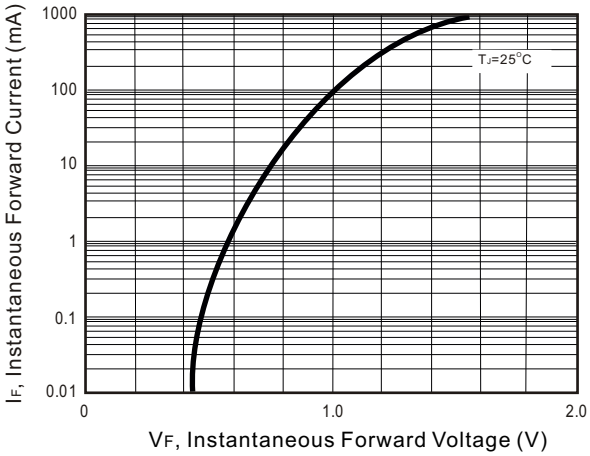


Fig.2 Leakage Current vs. Junction Temperature