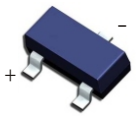
SMD Switching Diode

COMCHIP
SMD Diodes Specialist

CDST19-G/20-G/21-G

High Speed
RoHS Device



Features

-Fast switching diode.

-Surface mount package ideally for automatic insertion.

-For general purpose switching applications.

-High conductance.

Mechanical data

Case: SOT-23

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.

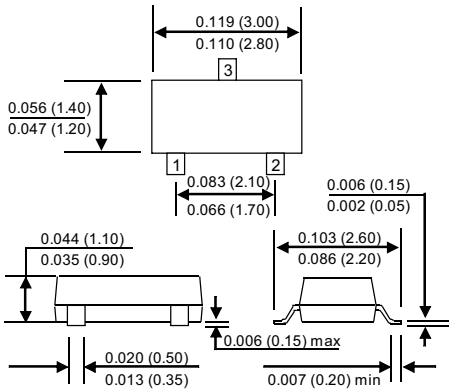
Weight: 0.008 gram.

Marking: CDST19-G JP

CDST20-G JR

CDST21-G JS

SOT-23



Dimensions in inches and (millimeters)

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

Parameter	Symbol	CDST19-G	CDST20-G	CDST21-G	Unit
Non-Repetitive peak reverse voltage	V_{RM}	100	150	200	V
DC blocking voltage	V_R	100	150	200	V
Average rectified output current	I_O	200			mA
Power dissipation	P_D	250			mW
Thermal resistance-Junction to ambient air	$R_{\theta JA}$	500			°C/W
Junction temperature	T_J	150			°C
Storage temperature range	T_{STG}	-65 ~ +150			°C

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

Parameter		Symbol	Test Conditions	Min	Max	Unit
Reverse breakdown voltage	CDST19-G CDST20-G CDST21-G	V_{BR}	I_R=100uA	100 150 200		V
Reverse leakage current	CDST19-G CDST20-G CDST21-G	I_R	V_R=100V V_R=150V V_R=200V		0.1	UA
Forward voltage		V_F	I_F=100mA I_F=200mA		1 1.25	V
Junction capacitance		C_J	V_R=0V, f=1MHz		5	pF
Reverse recovery time		t_{rr}	I_F=I_R=30mA, Irr=0.1xI_R		50	nS

Characteristic Curves (CDST19-G/20-G/21-G)

Fig. 1 - Forward Characteristics

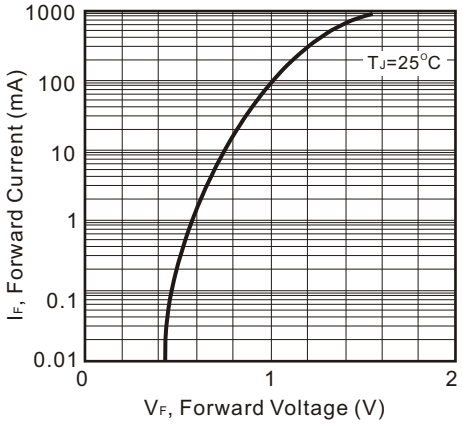


Fig. 2 - Leakage Current vs Junction Temperature