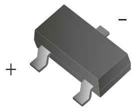
CDST19-G/20-G

High Speed
RoHS Device



Features

- -Fast switching diode.
- -Surface mount package ideally for automatic insertion.
- -For general purpose switching applications.
- -High conductance.

Mechanical data

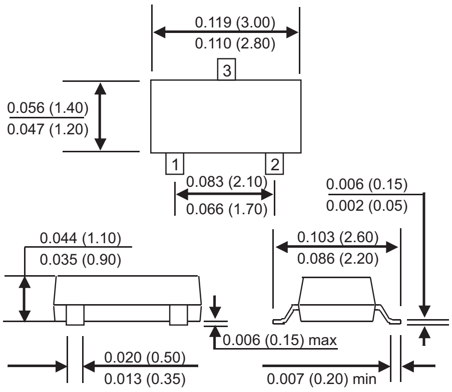
-Case: SOT-23

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

-Weight: 0.008 gram.

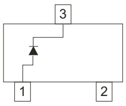
-Marking: CDST19-G JP
CDST20-G JR

SOT-23



Dimensions in inches and (millimeters)

Circuit Diagram



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

Parameter	Symbol	CDST19-G	CDST20-G	Unit
Non-Repetitive peak reverse voltage	V_{RM}	100	150	V
DC blocking voltage	V_R	100	150	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	V_{BR}	I_R=100uA	100 150		V
Reverse leakage current CDST19-G CDST20-G	I_R	V_R=100V V_R=150V		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)

Fig.1 - Forward Characteristics

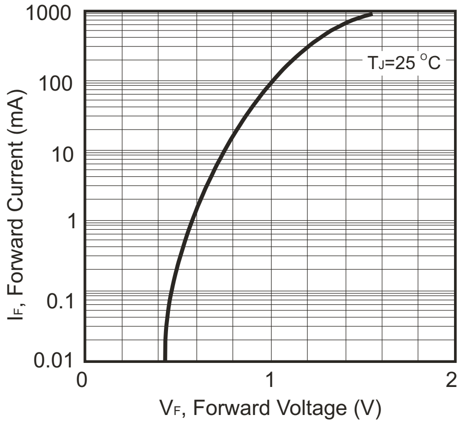


Fig.2 - Leakage Current vs Junction Temperature