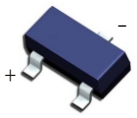
# SMD Switching Diode

COMCHIP
SMD Diodes Specialist

# CDSV3-19-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

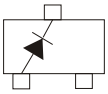
Case: SOT-323

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

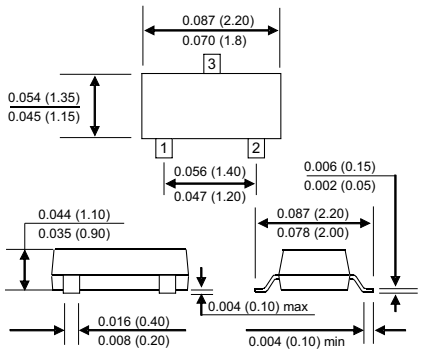
Marking: CDSV3-19-G KA8

CDSV3-20-G KT2

CDSV3-21-G KT3



SOT-323




Dimensions in inches and (millimeters)

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

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Power dissipation | $P_D$ | 200 | mW |
| Collector current | $I_F$ | 200 | mA |
| Collector-base voltage CDSV3-19-G<br>CDSV3-20-G<br>CDSV3-21-G | $V_R$ | 120<br>150<br>200 | V |
| Junction and storage temperature | $T_J$ , $T_{STG}$ | -55 ~ +150 | °C |

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

| Parameter | Symbol | Test Conditions | Min | Max | Unit |
|---|---|---|---|---|---|
| Reverse breakdown voltage CDSV3-19-G<br>CDSV3-20-G<br>CDSV3-21-G | $V_{(BR)R}$ | $I_R$=100uA | 100<br>150<br>200 | | V |
| Reverse leakage current CDSV3-19-G<br>CDSV3-20-G<br>CDSV3-21-G | $I_R$ | $V_R$=100V<br>$V_R$=150V<br>$V_R$=200V | | 0.1 | UA |
| Forward voltage | $V_F$ | $I_F$=100mA<br>$I_F$=200mA | | 1<br>1.25 | V |
| Diode capacitance | $C_D$ | $V_R$=0V, f=1MHz | | 5 | pF |
| Reverse recovery time | $t_{rr}$ | $I_F$=$I_R$=30mA, Irr=0.1x$I_R$ | | 50 | nS |

## Characteristic Curves (CDSV3-19-G/20-G/21-G)

Fig. 1 - Forward Characteristics

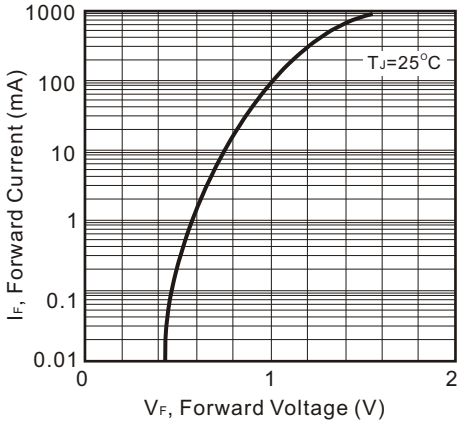



Fig. 2 - Leakage Current vs Junction Temperature