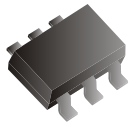
# Small Signal Switching Diodes

COMCHIP
SMD Diodes Specialist

# CDSV6-99SD-G

## Reverse Voltage: 75 Volts
## Forward Current: 215 mA
## RoHS Device



## Features

-Design for mounting on small surface.

-High speed switching.

-Ultra small surface mount package.

-Two BAV99 circuits in one package.

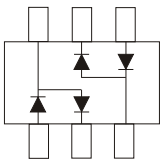
## Mechanical data

-Case: SOT-363, molded plastic.

-Terminals: solderable per MIL-STD-750, method 2026.

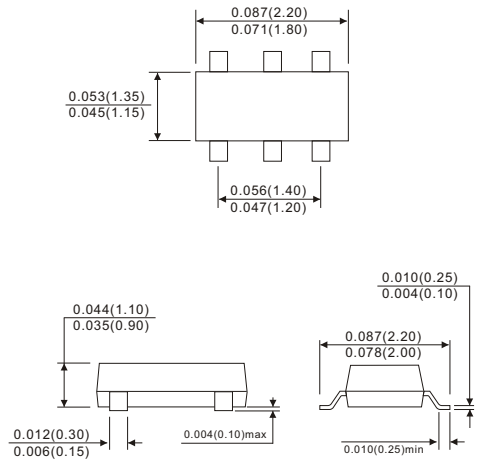
-Approx. weight: 0.006 grams

## Circuit diagram



CDSV6-99SD-G

**SOT-363**




Dimensions in inches and (millimeter)

## Maximum Ratings and Electrical Characteristics

(at Ta=25°C unless otherwise noted)

| Parameter | Symbol | Conditions | Value | Units |
|---|---|---|---|---|
| Repetitive peak reverse voltage | $V_{RRM}$ | | 75 | V |
| Reverse voltage | $V_R$ | | 75 | V |
| Forward current | $I_F$ | | 215 | mA |
| Peak surge forward current | $I_{FSM}$ | T=1.0 μS | 2 | A |
| Power dissipation | $P_D$ | | 200 | mW |
| Maximum forward voltage | $V_F$ | @$I_F$=1mA<br>@$I_F$=10mA<br>@$I_F$=50mA<br>@$I_F$=100mA | 0.715<br>0.855<br>1.0<br>1.25 | V |
| Maximum reverse current | $I_R$ | @$V_R$=20V<br>@$V_R$=75V<br>@$V_R$=25V, $T_J$=150°C<br>@$V_R$=75V, $T_J$=150°C | 0.025<br>2.5<br>30<br>50 | μA |
| Maximum reverse recovery time | $T_{rr}$ | $I_F$=$I_R$=10mA, $R_L$=100Ω | 4 | nS |
| Typical diode capacitance | $C_T$ | $V_R$=0V, f=1.0MHz | 2 | pF |
| Maximum junction temperature | $T_J$ | | 150 | °C |
| Storage temperature | $T_{STG}$ | | -55 to +150 | °C |

## RATING AND CHARACTERISTIC CURVES (CDSV6-99SD-G)

Fig.1 Forward Characteristics

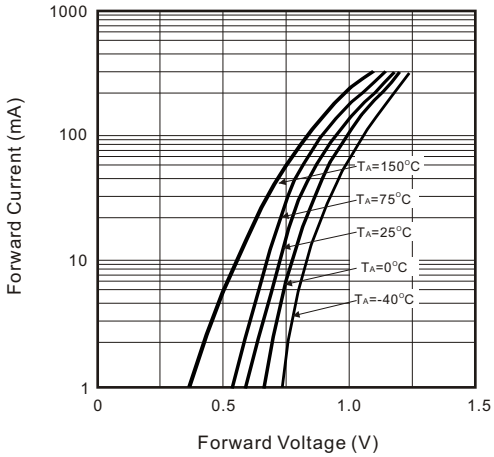



Fig.2 Reverse Characteristics

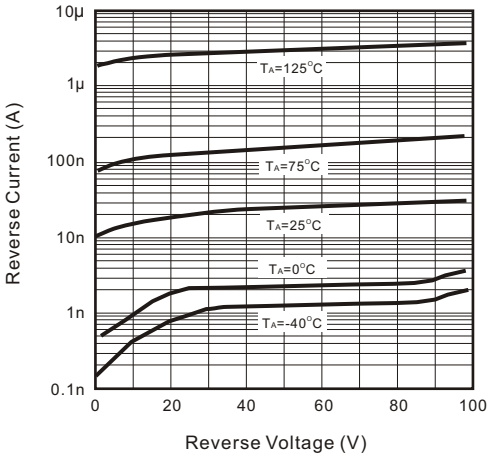



Fig.3 Capacitance Between Terminals Characteristics

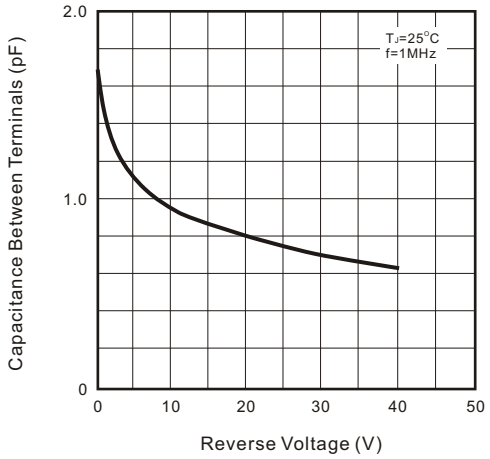



Fig.4 Power Derating Curve