

# Small Signal Switching Diodes



## CDSV6-4448TI/AQ/AD/CD/SD-G

Voltage: 80Volts  
Current: 500mA  
RoHS Device

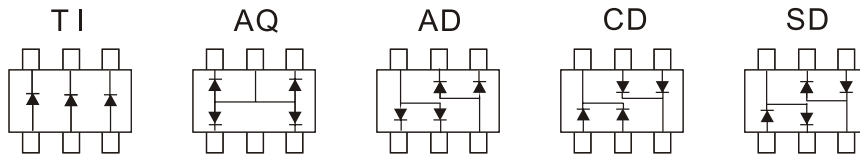
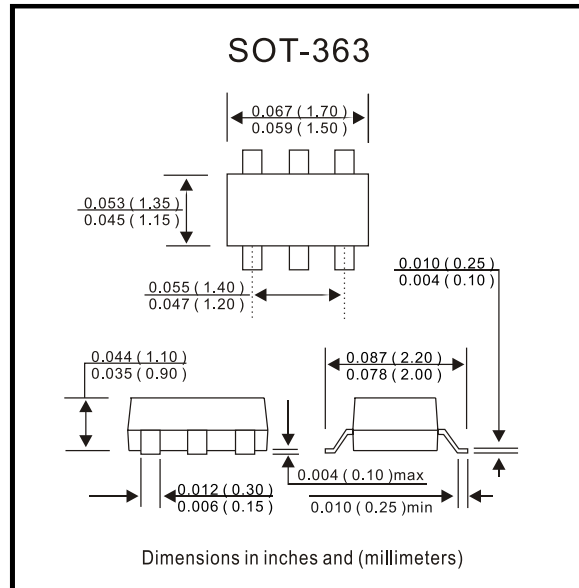


### Features

- Designed for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.

### Mechanical data

- Case:SOT-363, molded plastic.
- Terminals: Solder plated, solderable per MIL-STD-750, method 208.
- Approx. weight: 0.006 grams approx.



### Maximum Ratings and Electrical Characteristics

( at Ta = 25°C unless otherwise noted )

| Parameter                       | Condition                                                               | Symbol | Value                        | Unit |
|---------------------------------|-------------------------------------------------------------------------|--------|------------------------------|------|
| Repetitive peak reverse voltage |                                                                         | VRRM   | 80                           | V    |
| Reverse voltage                 |                                                                         | VR     | 80                           | V    |
| Forward continue current        |                                                                         | IFM    | 500                          | mA   |
| Surge peak forward current      | T = 1us                                                                 | IFSM   | 2                            | A    |
| Power dissipation               |                                                                         | Pd     | 200                          | mW   |
| Maximum forward voltage         | @ IF= 1 mA<br>@ IF= 10 mA<br>@ IF= 100mA<br>@ IF= 150mA                 | VF     | 0.72<br>0.855<br>1.0<br>1.25 | V    |
| Maximum reverse current         | @ VR= 70V<br>@ VR= 75V, Tj= 150°C<br>@ VR= 25V, Tj= 150°C<br>@ VR= 20V, | IR     | 0.1<br>50<br>30<br>0.25      | uA   |
| Max reverse recovery time       | VR=6V, IF=5mA                                                           | Trr    | 4                            | nS   |
| Typical diode capacitnace       | VR=6V, f=1MHz                                                           | CT     | 3.5                          | pF   |
| Max. Junction temperature       |                                                                         | Tj     | 150                          | °C   |
| Storage temperature             |                                                                         | TSTG   | -55 to +150                  | °C   |

Rev. A

## RATING AND CHARACTERISTIC CURVES ( CDSV6-4448TI-G/AQ-G/AD-G/CD-G/SD-G )

Fig. 1 - Forward characteristics

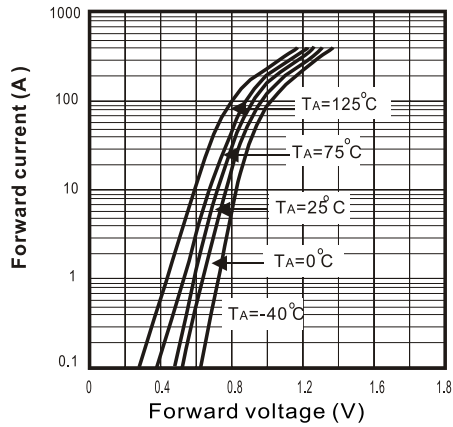


Fig. 2 - Reverse characteristics

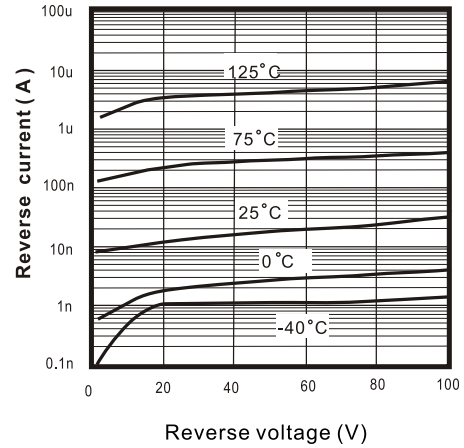


Fig. 3 - Capacitance between terminals characteristics

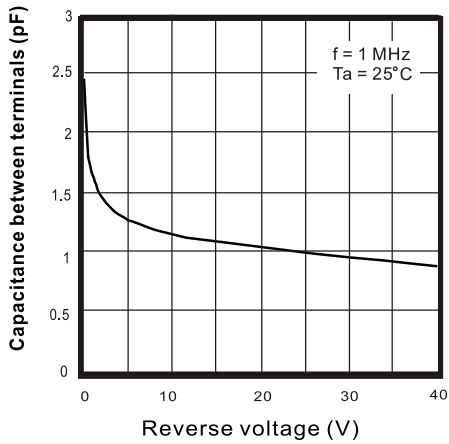


Fig. 4 - Power derating curve

