



DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPD6001 series types are silicon switching diodes manufactured by the epitaxial planar process, designed for switching applications requiring a extremely low leakage diode.

The following configurations are available:

| CMPD6001 | SINGLE | MARKING CODE: ULO |
|-----------|----------------------|-------------------|
| CMPD6001A | DUAL, COMMON ANODE | MARKING CODE: ULA |
| CMPD6001C | DUAL, COMMON CATHODE | MARKING CODE: ULC |
| CMPD6001S | DUAL, IN SERIES | MARKING CODE: ULS |

MAXIMUM RATINGS: (T_A=25°C)

| | SYMBOL | | UNITS |
|-----------------------------------|----------------------------------|-------------|-------|
| Continuous Reverse Voltage | V _R | 75 | V |
| Peak Repetitive Reverse Voltage | VRRM | 100 | V |
| Continuous Forward Current | I _F | 250 | mA |
| Peak Repetitive Forward Current | I _{FRM} | 250 | mA |
| Forward Surge Current, tp=1 µsec. | IFSM | 4000 | mA |
| Forward Surge Current, tp=1 sec. | IFSM | 1000 | mA |
| Power Dissipation | PD | 350 | mW |
| Operating and Storage | _ | | |
| Junction Temperature | T _J ,T _{stg} | -65 to +150 | °C |
| Thermal Resistance | Θ_{JA} | 357 | °C/W |

ELECTRICAL CHARACTERISTICS PER DIODE: (T_A=25°C unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | MAX | UNITS |
|-----------------|---------------------------------------------------------|-----|------|-------|
| I _R | V _R =75V | | 500 | pА |
| V _{BR} | I _R =100μA | 100 | | V |
| V _F | I _F =1.0mA | | 0.85 | V |
| V _F | I _F =10mA | | 0.95 | V |
| V _F | I _F =100mA | | 1.1 | V |
| ĊT | V _R =0, f=1.0 MHz | | 2.0 | pF |
| t _{rr} | $I_R = I_F = 10$ mA, $R_L = 100\Omega$, Rec. to 1.0 mA | | 3.0 | μs |

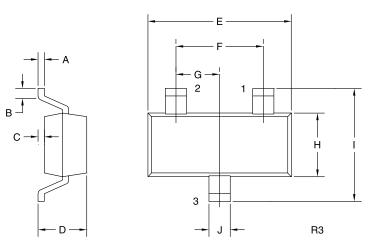
R1 (01-Mar 2001)



CMPD6001 CMPD6001A CMPD6001C CMPD6001S

SURFACE MOUNT LOW LEAKAGE SWITCHING DIODE

SOT-23 CASE - MECHANICAL OUTLINE



| DIMENSIONS | | | | | |
|------------------|--------|-------|--------|-------|--|
| | INCHES | | MILLIM | ETERS | |
| SYMBOL | MIN | MAX | MIN | MAX | |
| А | 0.003 | 0.007 | 0.08 | 0.18 | |
| В | 0.006 | - | 0.15 | - | |
| С | - | 0.005 | - | 0.13 | |
| D | 0.035 | 0.043 | 0.89 | 1.09 | |
| Ш | 0.110 | 0.120 | 2.80 | 3.05 | |
| F | 0.075 | | 1.90 | | |
| G | 0.037 | | 0.95 | | |
| Н | 0.047 | 0.055 | 1.19 | 1.40 | |
| | 0.083 | 0.098 | 2.10 | 2.49 | |
| J | 0.014 | 0.020 | 0.35 | 0.50 | |
| SOT-23 (REV: R3) | | | | | |

Pin Configuration

