

CMOSH-3
SURFACE MOUNT
SILICON SCHOTTKY DIODE

ULTRAmi™



SOD-523 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMOSH-3 type is a Silicon Schottky diode, epoxy molded in an ULTRAmi™ surface mount package, designed for fast switching applications requiring a low forward voltage drop.

MARKING CODE: 53

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Peak Repetitive Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current
 Peak Forward Surge Current, $t_p=10\text{ms}$
 Power Dissipation
 Operating and Storage Junction Temperature
 Thermal Resistance

SYMBOL

V_{RRM} 30
 I_F 100
 I_{FRM} 350
 I_{FSM} 750
 P_D 250
 T_J, T_{stg} -65 to +150
 θ_{JA} 500

UNITS

V
 mA
 mA
 mA
 mW
 $^\circ\text{C}$
 $^\circ\text{C/W}$

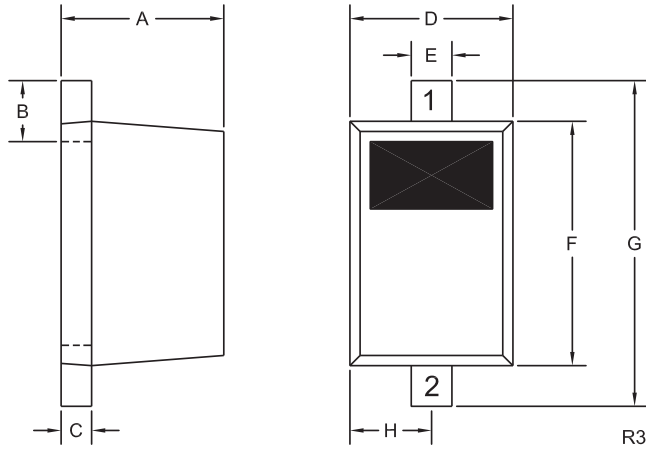
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|----------|---|-----|------|------|---------------|
| I_R | $V_R=25\text{V}$ | | 90 | 500 | nA |
| I_R | $V_R=25\text{V}, T_A=100^\circ\text{C}$ | | 25 | 100 | μA |
| BV_R | $I_R=100\mu\text{A}$ | 30 | | | V |
| V_F | $I_F=2.0\text{mA}$ | | 0.29 | 0.33 | V |
| V_F | $I_F=15\text{mA}$ | | 0.40 | 0.45 | V |
| V_F | $I_F=100\text{mA}$ | | 0.74 | 1.00 | V |
| C_T | $V_R=1.0\text{V}, f=1.0\text{MHz}$ | | 7.0 | | pF |
| t_{rr} | $I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$ | | | 5.0 | ns |

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SOD-523 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode

MARKING CODE: 53

| DIMENSIONS | | | | |
|-------------------|--------|-------|-------------|------|
| SYMBOL | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.020 | 0.031 | 0.50 | 0.80 |
| B | 0.008 | 0.016 | 0.20 | 0.40 |
| C | 0.002 | 0.008 | 0.05 | 0.20 |
| D | 0.028 | 0.035 | 0.70 | 0.90 |
| E | 0.008 | 0.014 | 0.20 | 0.35 |
| F | 0.039 | 0.055 | 1.00 | 1.40 |
| G | 0.055 | 0.071 | 1.40 | 1.80 |
| H | 0.016 | | 0.40 | |

SOD-523 (REV: R3)

R5 (11-April 2011)