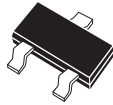


CMP SH-3E
 CMP SH-3AE
 CMP SH-3CE
 CMP SH-3SE

**ENHANCED SPECIFICATION
 SURFACE MOUNT
 SILICON SCHOTTKY DIODES**

**ENHANCED
 SPECIFICATION**



SOT-23 CASE

CMP SH-3E: SINGLE
 CMP SH-3AE: DUAL, COMMON ANODE
 CMP SH-3CE: DUAL, COMMON CATHODE
 CMP SH-3SE: DUAL, IN SERIES

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

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

MARKING CODE: D95E
MARKING CODE: DB1E
MARKING CODE: DB2E
MARKING CODE: DA5E

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMP SH-3E Series types are Enhanced Versions of the CMP SH-3 Series of Silicon Schottky Diodes in an SOT-23 Surface Mount Package.

FEATURED ENHANCED SPECIFICATIONS:

- ◆ I_F from 100mA max to 200mA max.
- ◆ B_{VR} from 30V min to 40V min.
- ◆ V_F from 1.0V max to 0.8V max.

| SYMBOL | | UNITS |
|----------------|-------------|--------------------|
| V_{RRM} | 40 | V |
| I_F | 200 | mA |
| I_{FRM} | 350 | mA |
| I_{FSM} | 750 | mA |
| P_D | 350 | mW |
| T_J, T_{stg} | -65 to +150 | $^\circ\text{C}$ |
| θ_{JA} | 357 | $^\circ\text{C/W}$ |

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

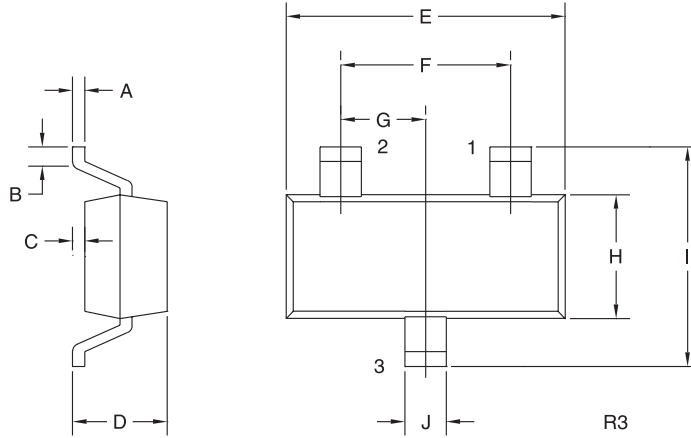
| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|------------|---|-----|------|------|---------------|
| ◆ B_{VR} | $I_R=100\mu\text{A}$ | 40 | 50 | | V |
| V_F | $I_F=2.0\text{mA}$ | | 0.29 | 0.33 | V |
| ◆ V_F | $I_F=15\text{mA}$ | | 0.37 | 0.42 | V |
| ◆ V_F | $I_F=100\text{mA}$ | | 0.61 | 0.80 | V |
| ◆◆ V_F | $I_F=200\text{mA}$ | | 0.65 | 1.0 | V |
| 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 |
| C_T | $V_R=1.0\text{V}, f=1\text{MHz}$ | | 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 |

- ◆ Enhanced specification.
- ◆◆ Additional Enhanced specification.

CentralTM
Semiconductor Corp.

**ENHANCED SPECIFICATION
SURFACE MOUNT
SILICON SCHOTTKY DIODES**

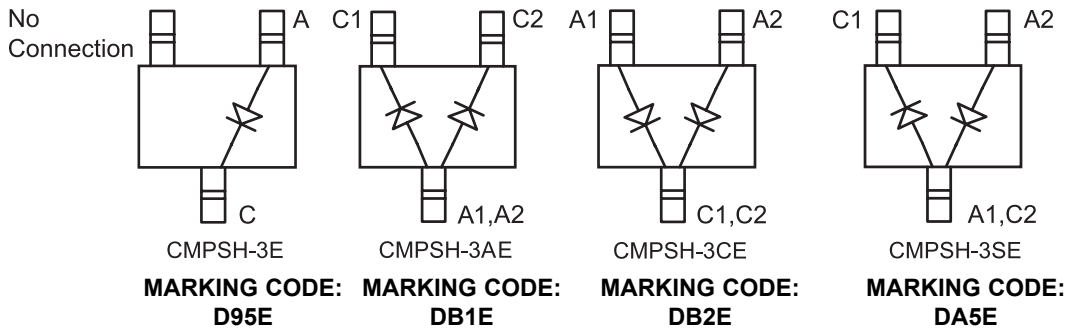
SOT-23 CASE - MECHANICAL OUTLINE



| SYMBOL | INCHES | | MILLIMETERS | |
|--------|--------|-------|-------------|------|
| | MIN | MAX | MIN | MAX |
| A | 0.003 | 0.007 | 0.08 | 0.18 |
| B | 0.006 | - | 0.15 | - |
| C | - | 0.005 | - | 0.13 |
| D | 0.035 | 0.043 | 0.89 | 1.09 |
| E | 0.110 | 0.120 | 2.80 | 3.05 |
| F | 0.075 | | 1.90 | |
| G | 0.037 | | 0.95 | |
| H | 0.047 | 0.055 | 1.19 | 1.40 |
| I | 0.083 | 0.098 | 2.10 | 2.49 |
| J | 0.014 | 0.020 | 0.35 | 0.50 |

SOT-23 (REV: R3)

PIN CONFIGURATION



R1 (13-November 2002)