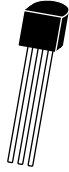


2N5060 THRU 2N5064

SILICON CONTROLLED RECTIFIER
0.8 AMP, 30 THRU 200 VOLTS



TO-92 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N5060 series types are epoxy molded Silicon Controlled Rectifiers designed for control systems and sensing circuit applications.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

| | SYMBOL | 2N5060 | 2N5061 | 2N5062 | 2N5063 | 2N5064 | UNITS |
|--|--------------------|--------|--------|-------------|--------|--------|------------------|
| Peak Repetitive Off-State Voltage | V_{DRM}, V_{RRM} | 30 | 60 | 100 | 150 | 200 | V |
| RMS On-State Current ($T_C=60^\circ\text{C}$) | $I_{T(RMS)}$ | | | 0.8 | | | A |
| Peak One Cycle Surge | I_{TSM} | | | 10 | | | A |
| Peak Forward Gate Current ($t_p=20\mu\text{s}$) | I_{GM} | | | 1.0 | | | A |
| Peak Reverse Gate Voltage | V_{GM} | | | 5.0 | | | V |
| Peak Gate Power Dissipation | P_{GM} | | | 2.0 | | | W |
| Average Gate Power Dissipation ($t=20\mu\text{s}$) | $P_G (AV)$ | | | 0.1 | | | W |
| Storage Temperature | T_{stg} | | | -40 to +150 | | | $^\circ\text{C}$ |
| Junction Temperature | T_J | | | -40 to +125 | | | $^\circ\text{C}$ |

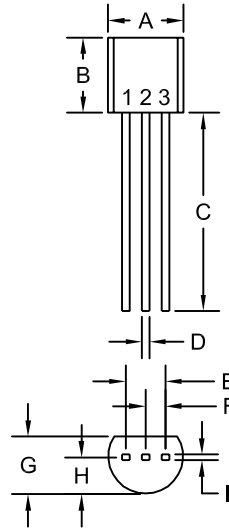
ELECTRICAL CHARACTERISTICS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|--------------------|--|-----|-----|-----|------------------|
| I_{DRM}, I_{RRM} | Rated $V_{DRM}, V_{RRM}, R_{GK}=1\text{K}\Omega$ | | | 1.0 | μA |
| I_{DRM}, I_{RRM} | Rated $V_{DRM}, V_{RRM}, T_C=125^\circ\text{C}, R_{GK}=1\text{K}\Omega$ | | | 50 | μA |
| I_{GT} | $V_D=7.0\text{V}, R_L=100\Omega, R_{GK}=1\text{K}\Omega$ | | | 200 | μA |
| I_{GT} | $V_D=7.0\text{V}, R_L=100\Omega, R_{GK}=1\text{K}\Omega, T_C=-65^\circ\text{C}$ | | | 350 | μA |
| I_H | $R_{GK}=1\text{K}\Omega$ | | | 5.0 | mA |
| I_H | $R_{GK}=1\text{K}\Omega, T_C=-65^\circ\text{C}$ | | | 10 | mA |
| V_{GT} | $V_D=7.0\text{V}, R_L=100\Omega$ | | | 0.8 | V |
| V_{GT} | $V_D=7.0\text{V}, R_L=100\Omega, T_C=-65^\circ\text{C}$ | | | 1.2 | V |
| V_{GT} | $V_D=7.0\text{V}, R_L=100\Omega, T_C=125^\circ\text{C}$ | 0.1 | | | V |
| V_{TM} | $I_{TM}=1.2\text{A}$ | | | 1.7 | V |
| dv/dt | $V_D=0.67\text{V} \times V_{DRM}, T_C=125^\circ\text{C}, R_{GK}=1\text{K}\Omega$ | | 30 | | V/ μs |
| t_q | $V_D=0.67\text{V} \times V_{DRM}, T_C=125^\circ\text{C}, R_{GK}=1\text{K}\Omega$ | | | 200 | μs |

R4 (25-August 2004)

**SILICON CONTROLLED RECTIFIER
0.8 AMP, 30 THRU 200 VOLTS**

TO-92 CASE - MECHANICAL OUTLINE



R1

LEAD CODE:

- 1) CATHODE
- 2) GATE
- 3) ANODE

MARKING CODE:

FULL PART NUMBER

| SYMBOL | DIMENSIONS | | | |
|---------|------------|-------|-------------|------|
| | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A (DIA) | 0.175 | 0.205 | 4.45 | 5.21 |
| B | 0.170 | 0.210 | 4.32 | 5.33 |
| C | 0.500 | - | 12.70 | - |
| D | 0.016 | 0.022 | 0.41 | 0.56 |
| E | 0.100 | | 2.54 | |
| F | 0.050 | | 1.27 | |
| G | 0.125 | 0.165 | 3.18 | 4.19 |
| H | 0.080 | 0.105 | 2.03 | 2.67 |
| I | 0.015 | | 0.38 | |

TO-92 (REV: R1)