

2N6214

**SILICON
PNP POWER TRANSISTOR**



TO-66 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N6214 is a silicon PNP power transistor mounted in a hermetically sealed metal case, designed for general purpose amplifier and switching applications.

MARKING: FULL PART NUMBER

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

| |
|---|
| Collector-Base Voltage |
| Collector-Emitter Voltage |
| Collector-Emitter Voltage |
| Collector-Emitter Voltage |
| Emitter-Base Voltage |
| Continuous Collector Current |
| Continuous Base Current |
| Power Dissipation |
| Power Dissipation ($T_C=100^{\circ}\text{C}$) |
| Operating and Storage Junction Temperature |
| Thermal Resistance |

SYMBOL

| | |
|----------------|-------------|
| V_{CBO} | 450 |
| V_{CEX} | 450 |
| V_{CER} | 425 |
| V_{CEO} | 400 |
| V_{EBO} | 6.0 |
| I_C | 2.0 |
| I_B | 1.0 |
| P_D | 35 |
| P_D | 20 |
| T_J, T_{stg} | -65 to +200 |
| Θ_{JC} | 5.0 |

UNITS

| |
|----------------------|
| V |
| V |
| V |
| V |
| V |
| A |
| A |
| W |
| W |
| $^{\circ}\text{C}$ |
| $^{\circ}\text{C/W}$ |

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

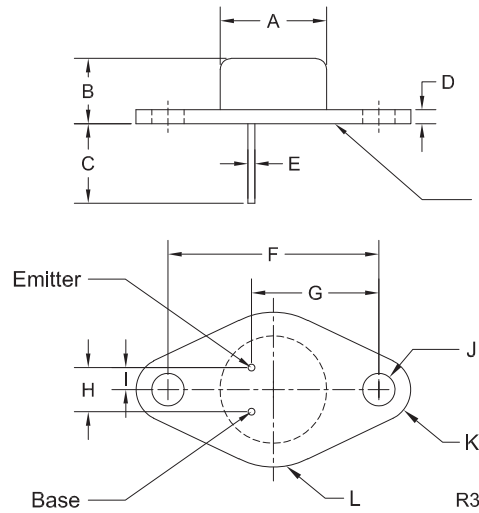
| SYMBOL | TEST CONDITIONS | MIN | MAX | UNITS |
|---------------|---|-----|-----|---------------|
| I_{CEV} | $V_{CE}=410\text{V}, V_{EB}=1.5\text{V}$ | | 1.0 | mA |
| I_{CEV} | $V_{CE}=410\text{V}, V_{EB}=1.5\text{V}, T_C=100^{\circ}\text{C}$ | | 10 | mA |
| I_{CEO} | $V_{CE}=150\text{V}$ | | 5.0 | mA |
| I_{EBO} | $V_{EB}=6.0\text{V}$ | | 0.5 | mA |
| BV_{CEO} | $I_C=200\text{mA}$ | 400 | | V |
| BV_{CER} | $I_C=200\text{mA}, R_{BE}=50\Omega$ | 425 | | V |
| BV_{CEX} | $I_C=200\text{mA}, V_{BE}=1.5\text{V}, R_{BE}=50\Omega$ | 450 | | V |
| BV_{EBO} | $I_B=500\text{mA}$ | 6.0 | | V |
| $V_{CE(SAT)}$ | $I_C=1.0\text{A}, I_B=125\text{mA}$ | | 2.5 | V |
| $V_{BE(SAT)}$ | $I_C=1.0\text{A}, I_B=125\text{mA}$ | | 1.4 | V |
| h_{FE} | $V_{CE}=5.0\text{V}, I_C=1.0\text{A}$ | 10 | 100 | |
| $ h_{fe} $ | $V_{CE}=10\text{V}, I_C=200\text{mA}, f=5.0\text{MHz}$ | 4.0 | | |
| C_{ob} | $V_{CB}=10\text{V}, f=1.0\text{MHz}$ | | 220 | pF |
| $I_{s/b}$ | $V_{CE}=40\text{V}$ | 875 | | mA |
| t_r | $V_{CC}=200\text{V}, I_C=1.0\text{A}, I_{B1}=I_{B2}=125\text{mA}$ | | 0.6 | μs |
| t_s | $V_{CC}=200\text{V}, I_C=1.0\text{A}, I_{B1}=I_{B2}=125\text{mA}$ | | 2.5 | μs |
| t_f | $V_{CC}=200\text{V}, I_C=1.0\text{A}, I_{B1}=I_{B2}=125\text{mA}$ | | 0.6 | μs |

R0 (15-January 2019)

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TO-66 CASE - MECHANICAL OUTLINE



MARKING:
FULL PART NUMBER

| DIMENSIONS | | | | |
|------------|--------|-------|-------------|-------|
| SYMBOL | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A (DIA) | 0.470 | 0.500 | 11.94 | 12.70 |
| B | 0.250 | 0.340 | 6.35 | 8.64 |
| C | 0.360 | - | 9.14 | - |
| D | 0.050 | 0.075 | 1.27 | 1.91 |
| E (DIA) | 0.028 | 0.034 | 0.71 | 0.86 |
| F | 0.956 | 0.964 | 24.28 | 24.48 |
| G | 0.570 | 0.590 | 14.48 | 14.99 |
| H | 0.190 | 0.210 | 4.83 | 5.33 |
| I | 0.093 | 0.107 | 2.36 | 2.72 |
| J (DIA) | 0.142 | 0.152 | 3.61 | 3.86 |
| K (RAD) | 0.141 | | 3.58 | |
| L (RAD) | 0.345 | | 8.76 | |

TO-66 (REV:R3)

R0 (15-January 2019)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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