

CMPFJ174
 CMPFJ175
 CMPFJ176
 CMPFJ177

**SURFACE MOUNT SILICON
 P-CHANNEL JFETS**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPFJ174 Series devices are epoxy molded P-Channel JFETs manufactured in an SOT-23 case, designed for low level amplifier applications.

**MARKING CODES: CMPFJ174: 6V
 CMPFJ175: 6W
 CMPFJ176: 6X
 CMPFJ177: 6Y**



SOT-23 CASE

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

Gate-Drain Voltage
 Gate-Source Voltage
 Gate Current
 Power Dissipation
 Operating and Storage Junction Temperature
 Thermal Resistance

SYMBOL

V_{GD} 30
 V_{GS} 30
 I_G 50
 P_D 350
 T_J, T_{stg} -65 to +150
 θ_{JA} 357

UNITS

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

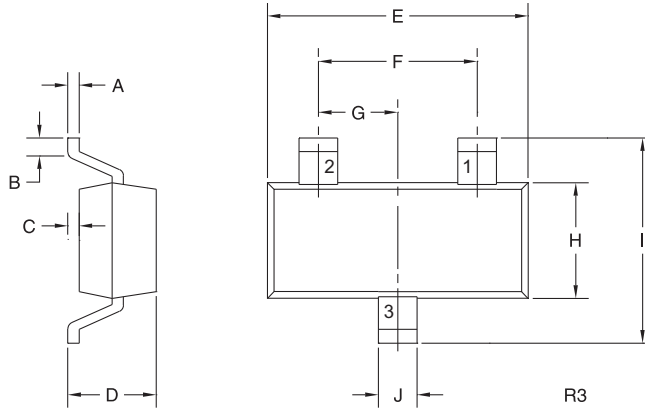
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | CMPFJ174 | | CMPFJ175 | | CMPFJ176 | | CMPFJ177 | | UNITS |
|---------------|--------------------------------------|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| | | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | |
| I_{GSS} | $V_{GS}=20\text{V}$ | - | 1.0 | - | 1.0 | - | 1.0 | - | 1.0 | nA |
| I_{DSS} | $V_{DS}=15\text{V}$ | 20 | 100 | 7.0 | 60 | 2.0 | 25 | 1.5 | 20 | mA |
| BV_{GSS} | $I_G=1.0\mu\text{A}$ | 30 | - | 30 | - | 30 | - | 30 | - | V |
| $V_{GS(off)}$ | $V_{DS}=15\text{V}, I_D=10\text{nA}$ | 5.0 | 10 | 3.0 | 6.0 | 1.0 | 4.0 | 0.8 | 2.5 | V |
| $r_{DS(ON)}$ | $V_{DS}=0.1\text{V}$ | - | 85 | - | 125 | - | 250 | - | 300 | Ω |

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SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Drain
- 2) Source
- 3) Gate

MARKING CODES:

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| SYMBOL | DIMENSIONS | | | |
|--------|------------|-------|-------------|------|
| | 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)

R2 (4-August 2014)