

CMPFJ175
CMPFJ176
CMPFJ177

**SURFACE MOUNT SILICON
P-CHANNEL JFETS**



SOT-23 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPFJ175, CMPFJ176, and CMPFJ177 are epoxy molded P-Channel JFETs manufactured in an SOT-23 case, designed for low level amplifier applications.

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

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 225
 T_J, T_{stg} -65 to +150
 Θ_{JA} 556

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

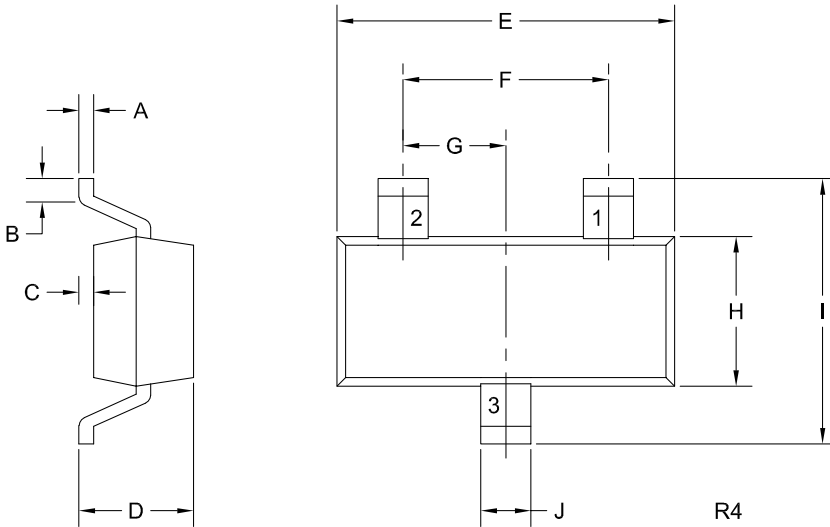
R5 (08-June 2023)

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SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODES:

CMPFJ175: 6W
CMPFJ176: 6X
CMPFJ177: 6Y

| DIMENSIONS | | | | |
|------------|--------|-------|-------------|------|
| 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 | 0.044 | 0.89 | 1.12 |
| 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 | 0.104 | 2.10 | 2.64 |
| J | 0.014 | 0.020 | 0.35 | 0.50 |

SOT-23 (REV: R4)

R5 (08-June 2023)

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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