

CMPFJ175  
 CMPFJ176  
 CMPFJ177

**SURFACE MOUNT SILICON  
 P-CHANNEL JFETS**



[www.centrasemi.com](http://www.centrasemi.com)



**SOT-23 CASE**

**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  
 $\Theta_{JA}$  556

**UNITS**

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

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

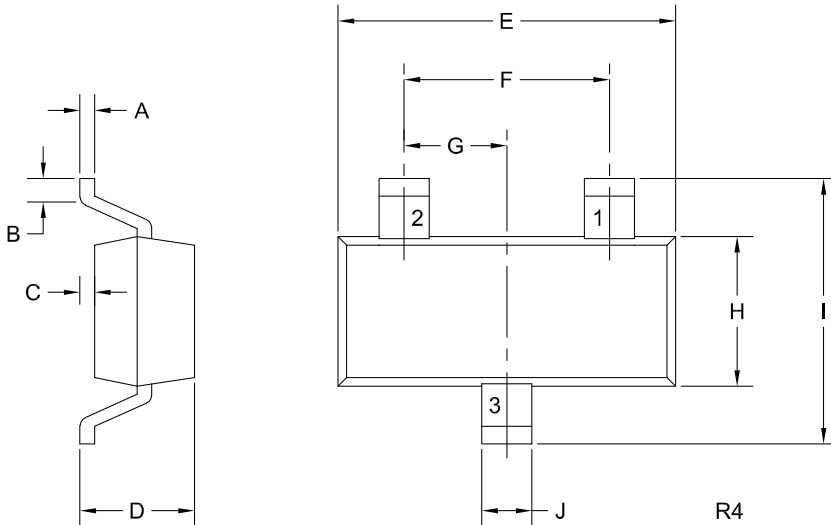
SYMBOL	TEST CONDITIONS	CMPFJ175		CMPFJ176		CMPFJ177		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
$I_{GSS}$	$V_{GS}=20\text{V}$	-	1.0	-	1.0	-	1.0	nA
$I_{DSS}$	$V_{DS}=15\text{V}$	7.0	60	2.0	25	1.5	20	mA
$BV_{GSS}$	$I_G=1.0\mu\text{A}$	30	-	30	-	30	-	V
$V_{GS(off)}$	$V_{DS}=15\text{V}, I_D=10\text{nA}$	3.0	6.0	1.0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

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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



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

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