

CMPF4416A
SURFACE MOUNT
N-CHANNEL
SILICON JFET



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPF4416A type is an epoxy molded N-Channel Silicon Junction Field Effect Transistor manufactured in an SOT-23 case, designed for VHF amplifier and mixer applications.

MARKING CODE: 6BG



SOT-23 CASE

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

	SYMBOL		UNITS
Drain-Source Voltage	V_{DS}	35	V
Gate-Source Voltage	V_{GS}	35	V
Gate Current	I_G	10	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	357	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{GSS}	$V_{GS}=20\text{V}$		1.0	nA
I_{DSS}	$V_{DS}=15\text{V}, V_{GS}=0$	5.0	15	mA
BV_{GSS}	$I_G=1.0\mu\text{A}$	35		V
$V_{GS(off)}$	$V_{DS}=15\text{V}, I_D=1.0\text{nA}$	2.5	6.0	V
g_{FS}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$	4.5	7.5	mS
C_{iss}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$		4.5	pF
C_{rss}	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$		1.2	pF
N_F	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}, R_G=1.0\text{M}\Omega$		2.5	dB

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SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

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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	0.043	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)

R5 (27-January 2010)

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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