CMPF5484
CMPF5485
CMPF5486

SURFACE MOUNT
N-CHANNEL
SILICON JFET



SOT-23 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPF5484 Series types are surface mount, N-Channel JFETs designed for RF amplifier and mixer applications. These devices will operate well in the VHF/UHF frequency range.

MARKING CODES:

CMPF5484: 6B
CMPF5485: 6B1
CMPF5486: 6H

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Gate-Drain Voltage	V_{GD}	25	V
Gate-Source Voltage	V_{GS}	25	V
Drain Current	I_D	30	mA
Gate Current	I_G	10	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

		CMPF5484		**CMPF5485**		**CMPF5486**		
SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
I_{GSS}	V_{GS}=20V	-	1.0	-	1.0	-	1.0	nA
I_{GSS}	V_{GS}=20V, T_A=100°C	-	0.2	-	0.2	-	0.2	µA
I_{DSS}	V_{DS}=15V	1.0	5.0	4.0	10	8.0	20	mA
BV_{GSS}	I_G=1.0µA	25	-	25	-	25	-	V
$V_{GS(off)}$	V_{DS}=15V, I_D=10nA	0.3	3.0	0.5	4.0	2.0	6.0	V
g_{FS}	V_{DS}=15V, V_{GS}=0, f=1.0KHz	3.0	6.0	3.5	7.0	4.0	8.0	mS
Y_{os}	V_{DS}=15V, V_{GS}=0, f=1.0KHz	-	50	-	60	-	75	µS
C_{iss}	V_{DS}=15V, V_{GS}=0, f=1.0MHz	-	5.0	-	5.0	-	5.0	pF
C_{oss}	V_{DS}=15V, V_{GS}=0, f=1.0MHz	-	2.0	-	2.0	-	2.0	pF
C_{rss}	V_{DS}=15V, V_{GS}=0, f=1.0MHz	-	1.0	-	1.0	-	1.0	pF
$R_{e(yis)}$	V_{DS}=15V, V_{GS}=0, f=100MHz	-	100	-	-	-	-	µS
$R_{e(yis)}$	V_{DS}=15V, V_{GS}=0, f=400MHz	-	-	-	1.0	-	1.0	mS
$R_{e(yos)}$	V_{DS}=15V, V_{GS}=0, f=100MHz	-	75	-	-	-	-	µS
$R_{e(yos)}$	V_{DS}=15V, V_{GS}=0, f=400MHz	-	-	-	100	-	100	µS
$R_{e(yis)}$	V_{DS}=15V, V_{GS}=0, f=100MHz	2.5	-	-	-	-	-	mS
$R_{e(yis)}$	V_{DS}=15V, V_{GS}=0, f=400MHz	-	-	3.0	-	3.5	-	mS

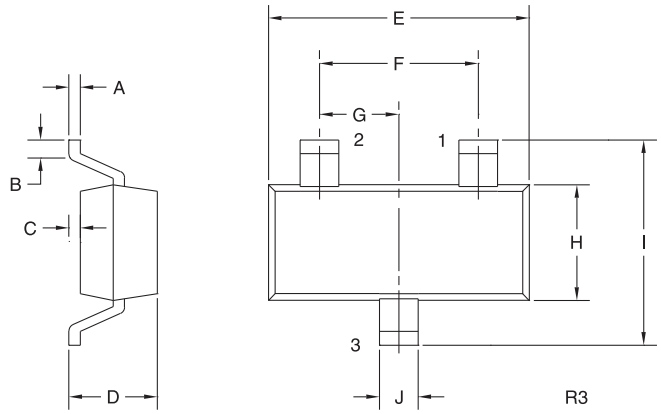
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ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

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SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**MIN**	**MAX**	**MIN**	**MAX**	**UNITS**
NF	V_{DS}=15V, V_{GS}=0, R_G=1MΩ, f=1.0KHz	-	2.5	-	2.5	-	2.5	dB
NF	V_{DS}=15V, I_D=1.0mA, R_G=1KΩ, f=100MHz	-	3.0	-	-	-	-	dB
NF	V_{DS}=15V, I_D=1.0mA, R_G=1KΩ, f=200MHz	-	4.0TYP	-	-	-	-	dB
NF	V_{DS}=15V, I_D=4.0mA, R_G=1KΩ, f=100MHz	-	-	-	2.0	-	2.0	dB
NF	V_{DS}=15V, I_D=4.0mA, R_G=1KΩ, f=400MHz	-	-	-	4.0	-	4.0	dB
G_{PS}	V_{DS}=15V, I_D=1.0mA, f=100MHz	16	25	-	-	-	-	dB
G_{PS}	V_{DS}=15V, I_D=1.0mA, f=200MHz	-	14 TYP	-	-	-	-	dB
G_{PS}	V_{DS}=15V, I_D=4.0mA, f=100MHz	-	-	18	30	18	30	dB
G_{PS}	V_{DS}=15V, I_D=4.0mA, f=400MHz	-	-	10	20	10	20	dB

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) Drain
2) Source
3) Gate

MARKING CODES:
CMPF5484: 6B
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DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)