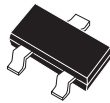


CMPF4391
CMPF4392
CMPF4393

N-CHANNEL JFET



SOT-23 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPF4391 series types are N-Channel Silicon Field Effect Transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for switching applications.

**Marking Codes are 6J, 6K, and 6G
Respectively.**

MAXIMUM RATINGS (T_A=25°C)

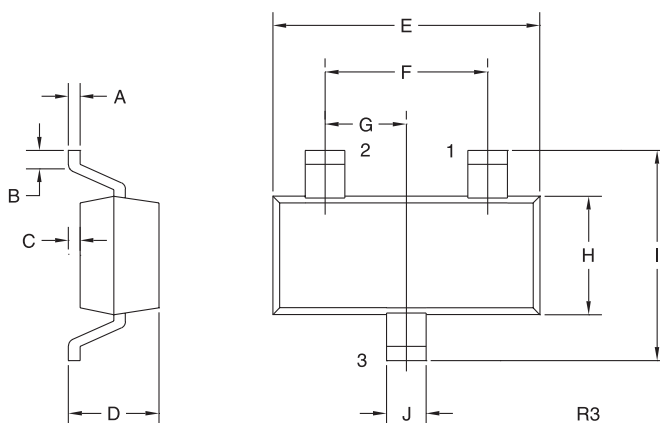
	SYMBOL		UNITS
Drain-Gate Voltage	V _{GD}	40	V
Gate-Source Voltage	V _{GS}	40	V
Drain-Source Voltage	V _{DS}	40	V
Gate Current	I _G	50	mA
Power Dissipation	P _D	350	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	Θ _{JA}	357	°C/W

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

SYMBOL	TEST CONDITIONS	CMPF4391		CMPF4392		CMPF4393		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I _{GSS}	V _{GS} =20V		0.1		0.1		0.1	nA
I _{GSS}	V _{GS} =20V, T _A =100°C		0.2		0.2		0.2	μA
I _{DSS}	V _{DS} =20V	50	150	25	75	5.0	30	mA
I _D (OFF)	V _{DS} =20V, V _{GS} =12V		0.1		-		-	nA
I _D (OFF)	V _{DS} =20V, V _{GS} =7.0V		-		0.1		-	nA
I _D (OFF)	V _{DS} =20V, V _{GS} =5.0V		-		-		0.1	nA
I _D (OFF)	V _{DS} =20V, V _{GS} =12V, T _A =100°C		0.2		-		-	μA
I _D (OFF)	V _{DS} =20V, V _{GS} =7.0V, T _A =100°C		-		0.2		-	μA
I _D (OFF)	V _{DS} =20V, V _{GS} =5.0V, T _A =100°C		-		-		0.2	μA
BV _{GSS}	I _G =1.0μA	40		40		40		V
V _{GS} (OFF)	V _{DS} =20V, I _D =1.0nA	4.0	10	2.0	5.0	0.5	3.0	V
V _{GS} (f)	I _G =1.0mA		1.0		1.0		1.0	V
V _{DS} (ON)	I _D =12mA		0.4		-		-	V
V _{DS} (ON)	I _D =6.0mA		-		0.4		-	V
V _{DS} (ON)	I _D =3.0mA		-		-		0.4	V

SYMBOL	TEST CONDITIONS	CMPF4391		CMPF4392		CMPF4393		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
$r_{DS(ON)}$	$I_D=1.0mA, V_{GS}=0$		30		60		100	Ω
$r_{ds(ON)}$	$V_{GS}=0, I_D=0, f=1.0kHz$		30		60		100	Ω
C_{iss}	$V_{DS}=20V, V_{GS}=0, f=1.0MHz$		14		14		14	pF
C_{rss}	$V_{GS}=12V, V_{DS}=0, f=1.0MHz$		3.5		-		-	pF
C_{rss}	$V_{GS}=7.0V, V_{DS}=0, f=1.0MHz$		-		3.5		-	pF
C_{rss}	$V_{GS}=5.0V, V_{DS}=0, f=1.0MHz$		-		-		3.5	pF
t_{ON}	$I_{D(ON)}=12mA$		15		-		-	ns
t_{ON}	$I_{D(ON)}=6.0mA$		-		15		-	ns
t_{ON}	$I_{D(ON)}=3.0mA$		-		-		15	ns
t_{OFF}	$V_{GS(OFF)}=12V$		20		-		-	ns
t_{OFF}	$V_{GS(OFF)}=7.0V$		-		35		-	ns
t_{OFF}	$V_{GS(OFF)}=5.0V$		-		-		50	ns

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) DRAIN
- 2) SOURCE
- 3) GATE

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)

R3 (28-Mar 2001)