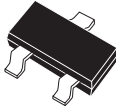


**CMPF4391  
CMPF4392  
CMPF4393**

**N-CHANNEL JFET**



**SOT-23 CASE**

**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** ( $T_A=25^{\circ}\text{C}$ )

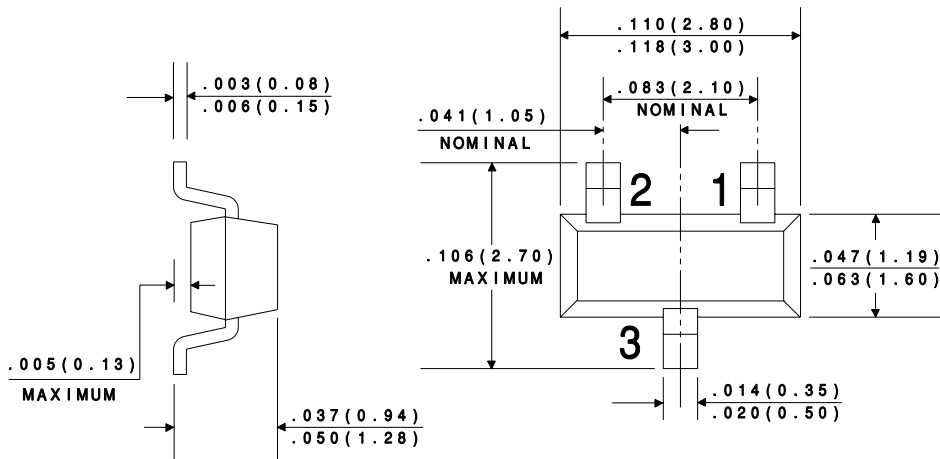
	<b>SYMBOL</b>		<b>UNITS</b>
Drain-Gate Voltage	$V_{GD}$	40	V
Gate-Source Voltage	$V_{GS}$	40	V
Drain-Source Voltage	$V_{DS}$	40	V
Gate Current	$I_G$	50	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	$\theta_{JA}$	357	$^{\circ}\text{C}/\text{W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>CMPF4391</b>		<b>CMPF4392</b>		<b>CMPF4393</b>		<b>UNITS</b>
		<b>MIN</b>	<b>MAX</b>	<b>MIN</b>	<b>MAX</b>	<b>MIN</b>	<b>MAX</b>	
$I_{GSS}$	$V_{GS}=20\text{V}$		0.1		0.1		0.1	nA
$I_{GSS}$	$V_{GS}=20\text{V}, T_A=100^{\circ}\text{C}$		0.2		0.2		0.2	$\mu\text{A}$
$I_{DSS}$	$V_{DS}=20\text{V}$	50	150	25	75	5.0	30	mA
$I_D(\text{OFF})$	$V_{DS}=20\text{V}, V_{GS}=12\text{V}$		0.1		-		-	nA
$I_D(\text{OFF})$	$V_{DS}=20\text{V}, V_{GS}=7.0\text{V}$		-		0.1		-	nA
$I_D(\text{OFF})$	$V_{DS}=20\text{V}, V_{GS}=5.0\text{V}$		-		-		0.1	nA
$I_D(\text{OFF})$	$V_{DS}=20\text{V}, V_{GS}=12\text{V}, T_A=100^{\circ}\text{C}$		0.2		-		-	$\mu\text{A}$
$I_D(\text{OFF})$	$V_{DS}=20\text{V}, V_{GS}=7.0\text{V}, T_A=100^{\circ}\text{C}$		-		0.2		-	$\mu\text{A}$
$I_D(\text{OFF})$	$V_{DS}=20\text{V}, V_{GS}=5.0\text{V}, T_A=100^{\circ}\text{C}$		-		-		0.2	$\mu\text{A}$
$BV_{GSS}$	$I_G=1.0\mu\text{A}$	40		40		40		V
$V_{GS}(\text{OFF})$	$V_{DS}=20\text{V}, I_D=1.0\text{nA}$	4.0	10	2.0	5.0	0.5	3.0	V
$V_{GS}(f)$	$I_G=1.0\text{mA}$		1.0		1.0		1.0	V
$V_{DS}(\text{ON})$	$I_D=12\text{mA}$		0.4		-		-	V
$V_{DS}(\text{ON})$	$I_D=6.0\text{mA}$		-		0.4		-	V
$V_{DS}(\text{ON})$	$I_D=3.0\text{mA}$		-		-		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	$\Omega$
$r_{ds(ON)}$	$V_{GS}=0, I_D=0, f=1.0kHz$		30		60		100	$\Omega$
$C_{iss}$	$V_{DS}=20V, V_{GS}=0, f=1.0MHz$		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

All dimensions in inches (mm).



LEAD CODE:

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



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