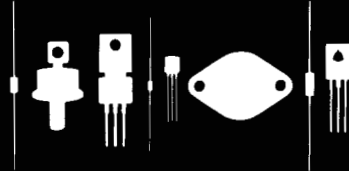


Central
Semiconductor Corp.

**Central
Semiconductor Corp.**
**Central™
Semiconductor Corp.**

145 Adams Avenue
Hauppauge, New York 11788



PN4091
PN4092
PN4093

N-CHANNEL SILICON
FIELD EFFECT TRANSISTOR

JEDEC TO-92 CASE (DSG)

DESCRIPTION

The CENTRAL SEMICONDUCTOR PN4091 series types are silicon N-channel field effect transistors designed for switching applications.

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

	SYMBOL		UNIT
Gate-Drain Voltage	V _{GD}	40	V
Gate-Source Voltage	V _{GS}	40	V
Drain-Source Voltage	V _{DS}	40	V
Gate Current	I _G	10	mA
Power Dissipation	P _D	625	W
Operating and Storage Temperature	T _J , T _{STG}	-65 TO +150	°C

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

SYMBOL	TEST CONDITIONS	PN4091		PN4092		PN4093		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
V _{DSS}	V _{DS} =20V	30		15		8.0		mA
I _{D(SG)}	V _{SG} =20V		0.2		0.2		0.2	nA
I _{D(G)}	V _{DG} =20V		0.2		0.2		0.2	nA
I _{D(OFF)}	V _{DS} =20V, V _{GS} =12V		0.2		-		-	nA
I _{D(OFF)}	V _{DS} =20V, V _{GS} =8.0V		-		0.2		-	nA
I _{D(OFF)}	V _{DS} =20V, V _{GS} =6.0V		-		-		0.2	nA
BV _{GSS}	I _G =1.0μA	40		40		40		V
BV _{DGO}	I _D =1.0μA	40		40		40		V
V _{GS(OFF)}	V _{DS} =20V, I _D =1.0nA	5.0	10	2.0	7.0	1.0	5.0	V
V _{DS(ON)}	I _D =6.6mA		0.2		-		-	V
V _{DS(ON)}	I _D =4.0mA		-		0.2		-	V
V _{DS(ON)}	I _D =2.5mA		-		-		0.2	V
r _{DS(ON)}	I _D =1.0mA		30		50		80	Ω
r _{ds(ON)}	V _{GS} =0, I _D =0, f=1.0kHz		30		50		80	Ω
C _{iss}	V _{DS} =20V, V _{GS} =0, f=1.0MHz		16		16		16	pF
C _{rss}	V _{DS} =0, V _{GS} =20V, f=1.0MHz		5.0		5.0		5.0	pF
t _{ON}	I _{D(ON)} =6.6mA		25		-		-	ns
t _{ON}	I _{D(ON)} =4.0mA		-		35		-	ns
t _{ON}	I _{D(ON)} =2.5mA		-		-		60	ns
t _{OFF}	V _{GS(OFF)} =12V		40		-		-	ns
t _{OFF}	V _{GS(OFF)} =8.0V		-		60		-	ns
t _{OFF}	V _{GS(OFF)} =6.0V		-		-		80	ns

Central™
Semiconductor Corp.

145 Adams Avenue
Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centralsemi.com