

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N4338
2N4339
2N4340
2N4341

N-CHANNEL JUNCTION
FIELD EFFECT TRANSISTOR

JEDEC TO-18 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4338 series types are N-Channel JFets mounted in a hermetically sealed metal case designed for low level, low noise amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNIT
Gate-Drain Voltage	V _{GD}	50	V
Gate-Source Voltage	V _{GS}	50	V
Drain-Source Voltage	V _{DS}	50	V
Gate Current	I _G	50	mA
Power Dissipation	P _D	325	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +200	°C

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

SYMBOL	TEST CONDITIONS	2N4338		2N4339		2N4340		2N4341		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I _{GSS}	V _{GS} =30V		0.1		0.1		0.1		0.1	nA
I _{DSS}	V _{DS} =15V	0.2	0.6	0.5	1.5	1.2	3.6	3.0	9.0	mA
BV _{GSS}	I _G =1.0μA	50		50		50		50		V
V _{GS(OFF)}	V _{DS} =15V, I _D =0.1μA	0.3	1.0	0.6	1.8	1.0	3.0	2.0	6.0	V
Y _{fs}	V _{DS} =15V, f=1.0kHz	600	1800	800	2400	1300	3000	2000	4000	μmos
Y _{os}	V _{DS} =15V, f=1.0kHz	-	5.0	-	15	-	30	-	60	μmos
C _{iSS}	V _{DS} =15V, f=1.0MHz		6.0		6.0		6.0		6.0	pF
C _{rSS}	V _{DS} =15V, f=1.0MHz		2.0		2.0		2.0		2.0	pF
NF	V _{DS} =15V, f=1.0kHz, R _G =1.0MΩ	1.0		1.0		1.0		1.0		dB