

CentralTM Semiconductor Corp.

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

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

	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	$^{\circ}\text{C}$

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

SYMBOL	TEST CONDITIONS	2N4338		2N4339		2N4340		2N4341		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I_{GSS}	$V_{GS}=30\text{V}$		0.1		0.1		0.1		0.1	nA
I_{DSS}	$V_{DS}=15\text{V}$	0.2	0.6	0.5	1.5	1.2	3.6	3.0	9.0	mA
BV_{GSS}	$I_G=1.0\mu\text{A}$	50		50		50		50		V
$V_{GS}(\text{OFF})$	$V_{DS}=15\text{V}, I_D=0.1\mu\text{A}$	0.3	1.0	0.6	1.8	1.0	3.0	2.0	6.0	V
$ Y_{fs} $	$V_{DS}=15\text{V}, f=1.0\text{kHz}$	600	1800	800	2400	1300	3000	2000	4000	μmhos
$ Y_{os} $	$V_{DS}=15\text{V}, f=1.0\text{kHz}$	-	5.0	-	15	-	30	-	60	μmhos
C_{iss}	$V_{DS}=15\text{V}, f=1.0\text{MHz}$		6.0		6.0		6.0		6.0	pF
C_{rss}	$V_{DS}=15\text{V}, f=1.0\text{MHz}$		2.0		2.0		2.0		2.0	pF
NF	$V_{DS}=15\text{V}, f=1.0\text{kHz}, R_G=1.0\text{M}\Omega$	1.0		1.0		1.0		1.0		dB