

2N4360

CASE 29-02, STYLE 7
TO-92 (TO-226AA)

JFET
LOW-FREQUENCY/LOW-NOISE

P-CHANNEL — DEPLETION

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	20	Vdc
Drain-Gate Voltage	V_{DG}	20	Vdc
Gate-Source Voltage	V_{GS}	20	Vdc
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	310 2.82	mW mW/ $^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +125	$^\circ\text{C}$

Refer to 2N5460 for graphs.

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

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Gate-Source Breakdown Voltage ($I_G = 10 \mu\text{A}$)	$V_{(BR)GSS}$	20	—	Vdc
Gate Reverse Current ($V_{GS} = 15$)	I_{GSS}	—	10	nA
Gate Source Cutoff Voltage ($V_{DS} = -10 \text{ V}$, $I_D = 1.0 \mu\text{A}$)	$V_{GS(off)}$	0.7	10.0	Vdc
Gate Source Voltage ($I_D = 0.3 \text{ mA}$, $V_{DS} = -10 \text{ V}$)	V_{GS}	0.4	9.0	Vdc
ON CHARACTERISTICS				
Zero-Gate-Voltage Drain Current ($V_{DS} = -10 \text{ V}$, $V_{GS} = 0 \text{ V}$)	I_{DSS}	3.0	30	mA
SMALL-SIGNAL CHARACTERISTICS				
Drain-Source "ON" Resistance ($I_D = 0$, $V_{GS} = 0$, $f = 1.0 \text{ kHz}$)	r_{ds}	—	700	Ohms
Forward Transfer Admittance ($V_{DS} = -10 \text{ V}$, $V_{GS} = 0 \text{ V}$, $f = 1.0 \text{ kHz}$)	$ y_{fs} $	2000	8000	μmhos
Output Admittance ($V_{DS} = -10 \text{ V}$, $V_{GS} = 0 \text{ V}$, $f = 1.0 \text{ kHz}$)	$ y_{os} $	—	100	μmhos
Common Source Forward Transconductance ($V_{DS} = -10 \text{ V}$, $V_{GS} = 0 \text{ V}$, $f = 1.0 \text{ MHz}$)	$\text{Re}(y_{fs})$	1500	—	μmhos
Input Capacitance ($V_{DS} = -10 \text{ V}$, $f = 1.0 \text{ MHz}$)	C_{iss}	—	20	pF
Reverse Transfer Capacitance ($V_{DS} = -10 \text{ V}$, $f = 1.0 \text{ MHz}$)	C_{rss}	—	5.0	pF
FUNCTIONAL CHARACTERISTICS				
Noise Figure ($V_{DS} = -10 \text{ V}$, $I_D = 1.0 \text{ mA}$, $R_G = 1.0 \text{ m}\Omega$, $f = 100 \text{ Hz}$)	NF	—	5.0	dB