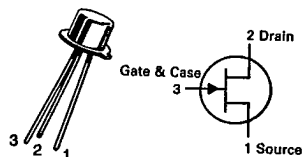


2N3437
2N3438**CASE 22-03, STYLE 4**
TO-18 (TO-206AA)**JFETs**
LOW FREQUENCY**N-CHANNEL — DEPLETION****MAXIMUM RATINGS**

Rating	Symbol	Value	Unit
Drain-Gate Voltage	V_{DG}	50	Vdc
Gate-Source Voltage	V_{GS}	50	Vdc
Gate Current	I_G	10	mA
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	300 1.7	mW mW/ $^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +200	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Gate-Source Breakdown Voltage ($I_G = 1.0 \mu\text{A}$)	$V_{(BR)GSS}$	50	—	Vdc
Gate Reverse Current ($V_{GS} = -30 \text{ V}$)	I_{GSS}	—	0.5	nA
Gate Source Cutoff Voltage ($V_{DS} = 20 \text{ V}$, $I_D = 1.0 \text{ nA}$)	$V_{GS(off)}$	—	-5.0 -2.5	Vdc
Gate Source Voltage ($V_{DS} = 20 \text{ V}$, $I_D = 1.0 \mu\text{A}$)	V_{GS}	—	-4.8 -2.3	Vdc

ON CHARACTERISTICS

Zero-Gate-Voltage Drain Current ($V_{DS} = 20 \text{ V}$)	I_{DSS}^*	0.8 0.2	4.0 1.0	mA
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SMALL-SIGNAL CHARACTERISTICS

Forward Transfer Admittance ($V_{DS} = 20 \text{ V}$, $f = 1.0 \text{ kHz}$)	$ y_{fs} $	1500 800	6000 4500	μmhos
Output Admittance ($V_{DS} = 30 \text{ V}$, $f = 1.0 \text{ kHz}$)	$ y_{os} $	—	20 5.0	μmhos
Input Capacitance ($V_{DS} = 10 \text{ V}$) ($V_{DS} = 6.0 \text{ V}$) ($V_{DS} = 4.0 \text{ V}$, $f = 1.0 \text{ MHz}$)	C_{iss}	—	18	pF

FUNCTIONAL CHARACTERISTICS

Noise Figure ($V_{DS} = 10 \text{ V}$, $R_G = 1.0 \text{ m}\Omega$, $f = 1.0 \text{ kHz}$)	NF	—	2.0	dB
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*Pulse Width $\leq 630 \text{ ms}$, Duty Cycle $\leq 10\%$.