

J111 J112 J113

CASE 29-02, STYLE 5
TO-92 (TO-226AA)

JFET
CHOPPER

N-CHANNEL — DEPLETION

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Drain-Gate Voltage	V _{DG}	−35	V _{dc}
Gate-Source Voltage	V _{GS}	−35	V _{dc}
Gate Current	I _G	50	mA
Total Device Dissipation @ T _A = 25°C Derate above 25°C	P _D	625 5.68	mW mW/°C
Lead Temperature	T _L	300	°C
Operating and Storage Junction Temperature Range	T _J , T _{stg}	−55 to +150	°C

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

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Gate-Source Breakdown Voltage (I _G = −1.0 μA)	V _{(BR)GSS}	35	—	V _{dc}
Gate Reverse Current (V _{GS} = −15 V)	I _{GSS}	—	−1.0	nA
Gate Source Cutoff Voltage (V _{DS} = 5.0 V, I _D = 1.0 μA)	V _{GS(off)}	<div>J111 −3.0</div> <div>J112 −1.0</div> <div>J113 −0.5</div>	<div>−10</div> <div>−5.0</div> <div>−3.0</div>	V
Drain-Cutoff Current (V _{DS} = 5.0 V, V _{GS} = −10 V)	I _{D(off)}	—	1.0	nA
ON CHARACTERISTICS				
Zero-Gate-Voltage Drain Current* (V _{DS} = 15 V)	I _{DSS}	<div>J111 20</div> <div>J112 5.0</div> <div>J113 2.0</div>	—	mA
Static Drain-Source On Resistance (V _{DS} = 0.1 V)	r _{DS(on)}	—	<div>33</div> <div>50</div> <div>100</div>	Ohms
Drain Gate and Source Gate On-Capacitance (V _{DS} = V _{GS} = 0, f = 1.0 MHz)	C _{dg(on)} + C _{sg(on)}	—	28	pF
Drain Gate Off-Capacitance (V _{GS} = −10 V, f = 1.0 MHz)	C _{dg(off)}	—	5.0	pF
Source Gate Off-Capacitance (V _{GS} = −10 V, f = 1.0 MHz)	C _{sg(off)}	—	5.0	pF

*Pulse Width = 300 μsec, Duty Cycle = 3.0%.