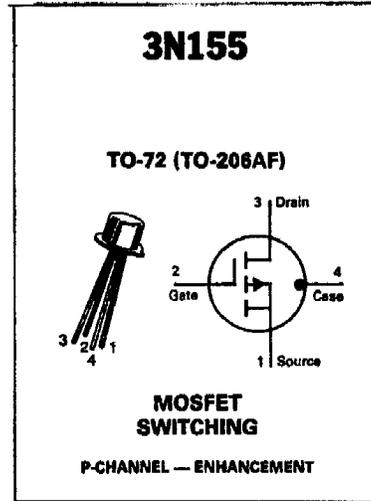


**MAXIMUM RATINGS**

Rating	Symbol	Value	Unit
Drain-Source Voltage	V <sub>DS</sub>	±35	Vdc
Drain-Gate Voltage	V <sub>DG</sub>	±60	Vdc
Gate-Source Voltage	V <sub>GS</sub>	±50	Vdc
Drain Current	I <sub>D</sub>	30	mAdc
Total Device Dissipation @ T <sub>A</sub> = 25°C Derate above 25°C	P <sub>D</sub>	300 2.0	mW mW/°C
Junction Temperature Range	T <sub>J</sub>	-65 to +175	°C
Storage Channel Temperature Range	T <sub>stg</sub>	-65 to +175	°C



**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted.)**

Characteristic	Symbol	Min	Typ	Max	Unit
<b>OFF CHARACTERISTICS</b>					
Drain-Source Breakdown Voltage (I <sub>D</sub> = -10 μAdc, V <sub>G</sub> = V <sub>S</sub> = 0)	V <sub>(BR)DSX</sub>	-35	—	—	Vdc
Zero-Gate-Voltage Drain Current (V <sub>DS</sub> = -10 Vdc, V <sub>GS</sub> = 0) (V <sub>DS</sub> = -10 Vdc, V <sub>GS</sub> = 0, T <sub>A</sub> = 125°C)	I <sub>DSS</sub>	—	—	-1.0 -1000	nAdc
Gate Reverse Current (V <sub>GS</sub> = +50 Vdc, V <sub>DS</sub> = 0) (V <sub>GS</sub> = +25 Vdc, V <sub>DS</sub> = 0)	I <sub>GSS</sub>	—	—	+1000 +10	pAdc
Resistance Drain Source (I <sub>D</sub> = 0, V <sub>GS</sub> = 0)	r <sub>DS(off)</sub>	1 × 10 <sup>+10</sup>	—	—	Ohms
Resistance Gate Source Input (V <sub>GS</sub> = -25 Vdc)	R <sub>GS</sub>	—	1 × 10 <sup>+16</sup>	—	Ohms
Gate Forward Leakage Current (V <sub>GS</sub> = -50 Vdc, V <sub>DS</sub> = 0) (V <sub>GS</sub> = -25 Vdc, V <sub>DS</sub> = 0)	I <sub>G(f)</sub>	—	—	-1000 -10	pAdc
<b>ON CHARACTERISTICS</b>					
Gate Threshold Voltage (V <sub>DS</sub> = -10 Vdc, I <sub>D</sub> = -10 μAdc) 3N155	V <sub>GS(Th)</sub>	-1.5	—	-3.2	Vdc
Drain-Source On-Voltage (I <sub>D</sub> = -2.0 mAdc, V <sub>GS</sub> = -10 Vdc)	V <sub>DS(on)</sub>	—	—	-1.0	Vdc
Static Drain-Source On Resistance (I <sub>D</sub> = 0 mAdc, V <sub>GS</sub> = -10 Vdc)	r <sub>DS(on)</sub>	—	—	600	Ohms
On-State Drain Current (V <sub>DS</sub> = -15 Vdc, V <sub>GS</sub> = -10 Vdc)	I <sub>D(on)</sub>	-5.0	—	—	mAdc
<b>SMALL-SIGNAL CHARACTERISTICS</b>					
Drain-Source Resistance (V <sub>GS</sub> = -10 Vdc, I <sub>D</sub> = 0, f = 1.0 kHz) (V <sub>GS</sub> = -15 Vdc, I <sub>D</sub> = 0, f = 1.0 kHz)	r <sub>ds(on)</sub>	—	—	400 350	Ohms
Forward Transfer Admittance (V <sub>DS</sub> = -15 Vdc, I <sub>D</sub> = -2.0 mAdc, f = 1.0 kHz)	y <sub>fs</sub>	1000	—	4000	μmhos
Input Capacitance (V <sub>DS</sub> = -15 Vdc, V <sub>GS</sub> = -10 Vdc, f = 140 kHz)	C <sub>iss</sub>	—	—	5.0	pF
Reverse Transfer Capacitance (V <sub>DS</sub> = 0, V <sub>GS</sub> = 0, f = 140 kHz)	C <sub>rss</sub>	—	—	1.3	pF
Drain-Substrate Capacitance (V <sub>D(SUB)</sub> = -10 Vdc, f = 140 kHz)	C <sub>d(sub)</sub>	—	—	4.0	pF
<b>SWITCHING CHARACTERISTICS</b>					
Turn-On Delay	V <sub>DD</sub> = -10 Vdc, I <sub>D(on)</sub> = -2.0 mAdc, V <sub>GS(on)</sub> = -10 Vdc, V <sub>GS(off)</sub> = 0)	t <sub>d</sub>	—	—	45 μs
Rise Time		t <sub>r</sub>	—	—	65 ns
Turn-Off Delay		t <sub>e</sub>	—	—	60 ns
Fall Time		t <sub>f</sub>	—	—	100 ns



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