ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

NTE460
Silicon P–Channel JFET Transistor
AF Amp

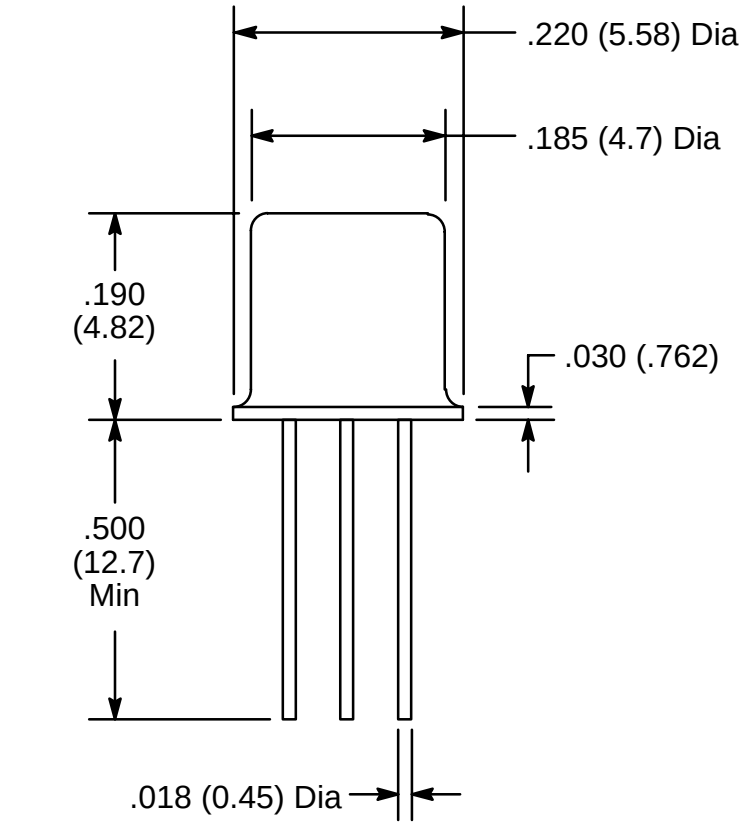
Absolute Maximum Ratings:

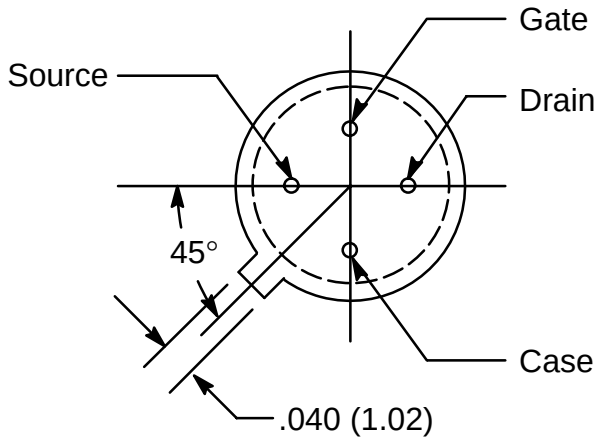
Drain–Gate Voltage, V_{DG} 20V
Reverse Gate–Source Voltage, V_{GSR} 20V
Gate Current, I_G 10mA
Total Device Dissipation (T_A = +25°C), P_D 0.3W
Derate above 25°C . . . . . 1.7mW/°C
Storage Temperature Range, T_{stg} . . . . . –65° to +200°C

Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
OFF Characteristics						
Gate–Source Breakdown Voltage	$V_{(BR)GSS}$	I_G = 10μA, V_{DS} = 0	20	–	–	V
Gate Reverse Current	I_{GSS}	V_{GS} = 10V, V_{DS} = 0	–	–	10	nA
		V_{GS} = 10V, V_{DS} = 0, T_A = +150°C	–	–	10	μA
ON Characteristics						
Zero–Gate–Voltage Drain Current	I_{DSS}	V_{DS} = –10V, V_{GS} = 0, Note 1	2.0	–	6.0	mA
Gate–Source Voltage	V_{GS}	V_{DG} = –15V, I_D = 10μA	–	–	6.0	V
Drain–Source Resistance	r_{DS}	I_D = 100μA, V_{GS} = 0	–	–	800	Ω
Small–Signal Characteristics						
Forward Transfer Admittance	$\|y_{fs}\|$	V_{DS} = 10V, I_D = 2mA, f = 1kHz, Note 1	1500	–	3000	μmhos
		V_{DS} = 10V, I_D = 2mA, f = 10MHz, Note 1	1350	–	–	μmhos
Output Admittance	$\|y_{os}\|$	V_{DS} = 10V, I_D = 2mA, f = 1kHz	–	–	40	μmhos
Reverse Transfer Conductance	$\|y_{rs}\|$	V_{DS} = 10V, I_D = 2mA, f = 1kHz	–	–	0.1	μmhos
Input Conductance	$\|y_{is}\|$	V_{DS} = 10V, I_D = 2mA, f = 1kHz	–	–	0.2	μmhos
Inpu Capacitance	C_{iss}	V_{DS} = 10V, V_{GS} = 1V, f = 1MHz	–	–	20	pF
Functional Characteristics						
Noise Figure	NF	V_{DS} = –5V, I_D = 1mA, R_g = 1MΩ, f = 1kHz	–	–	3.0	dB

Note 1. Pulse Test: PulseWidth ≤ 630ms, Duty Cycle ≤ 10%.


.220 (5.58) Dia
.185 (4.7) Dia
.190
(4.82)
.030 (.762)
.500
(12.7)
Min
.018 (0.45) Dia


Gate
Source
Drain
45°
Case
.040 (1.02)