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2N3458  
 2N3459  
 2N3460

**N-CHANNEL JUNCTION  
 FIELD EFFECT TRANSISTOR**

**JEDEC TO-18 CASE**

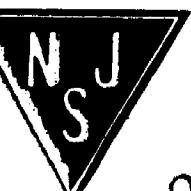
2N3458, 2N3459, 2N3460 types are silicon N-Channel Junction Field Effect Transistors designed for low frequency, low noise amplifier applications.

MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ )

	<u>SYMBOL</u>		<u>UNITS</u>
Drain-Gate Voltage	$V_{DG}$	50	V
Gate-Source Voltage	$V_{GS}$	50	V
Gate Current	$I_G$	10	mA
Power Dissipation	$P_D$	300	mW
Storage Temperature	$T_{stg}$	-65 to +175	$^\circ\text{C}$

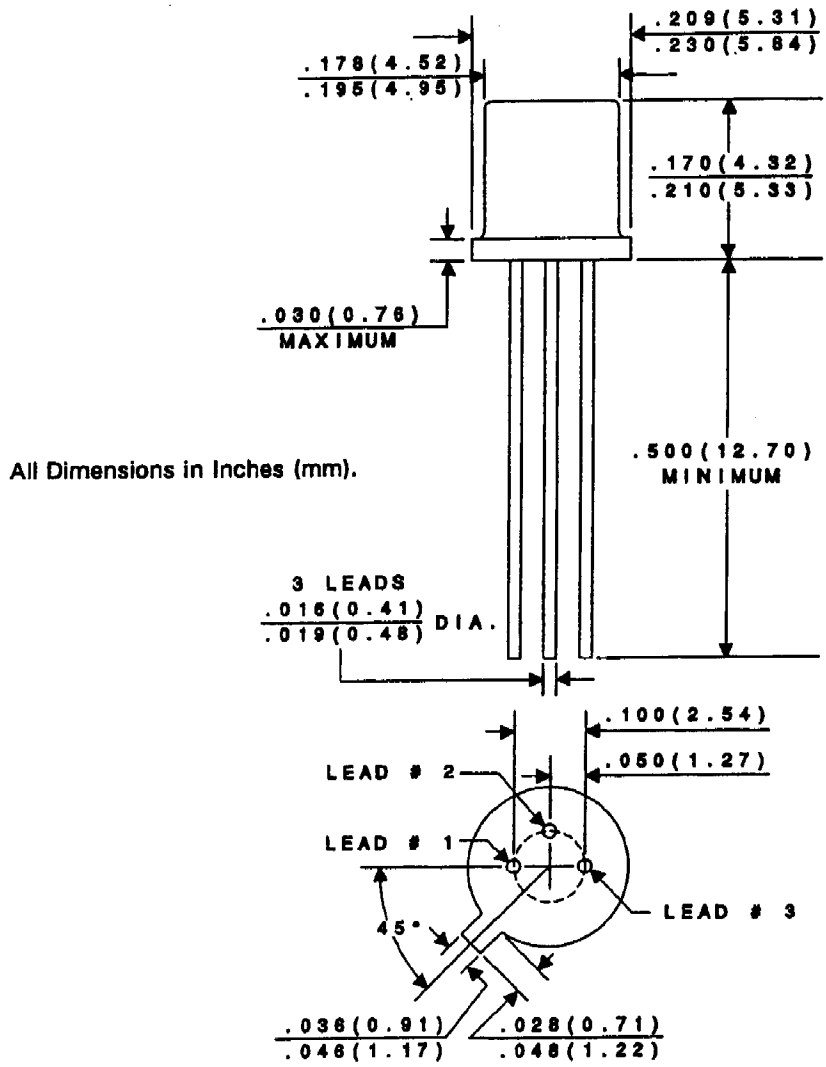
ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	2N3458		2N3459		2N3460		<u>UNITS</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
$I_{GSS}$	$V_{GS} = 30\text{V}$		0.25		0.25		0.25	nA
$I_{DSS}$	$V_{DS} = 20\text{V}$	3.0	15	0.8	4.0	0.2	1.0	mA
$BV_{GSS}$	$I_G = 1.0\mu\text{A}$	50		50		50		V
$V_{GS(OFF)}$	$V_{DS} = 20\text{V}, I_D = 1.0\mu\text{A}$		7.8		3.4		1.8	V
$ y_{fs} $	$V_{DS} = 20\text{V}, f = 1.0\text{kHz}$	2500	10000	1500	6000	800	4500	$\mu\text{mhos}$
$ y_{os} $	$V_{DS} = 30\text{V}, f = 1.0\text{kHz}$		35		20		5.0	$\mu\text{mhos}$
$C_{iss}$	$V_{DS} = 10\text{V}$		18		18		18	pF
$C_{oss}$	$V_{DS} = 30\text{V}$		5.0		5.0		5.0	pF
NF	$V_{DS} = 10\text{V}, f = 20\text{Hz}, R_G = 1.0\text{M}\Omega$		6.0		4.0		4.0	dB



NJ Semi-Conductors reserves the right to change test conditions, parameters limits and package dimensions without notice information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

**Quality Semi-Conductors**



All Dimensions in Inches (mm).

LEAD CODE:

- 1) SOURCE
- 2) DRAIN
- 3) GATE