Data Sheet

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Manufacturers of World Class Discrete Semiconductors

2N3458
2N3459
2N3460

N-CHANNEL JUNCTION FIELD EFFECT TRANSISTOR

JEDEC TO-18 CASE

DESCRIPTION

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

MAXIMUM RATINGS ($T_A = 25°C$)

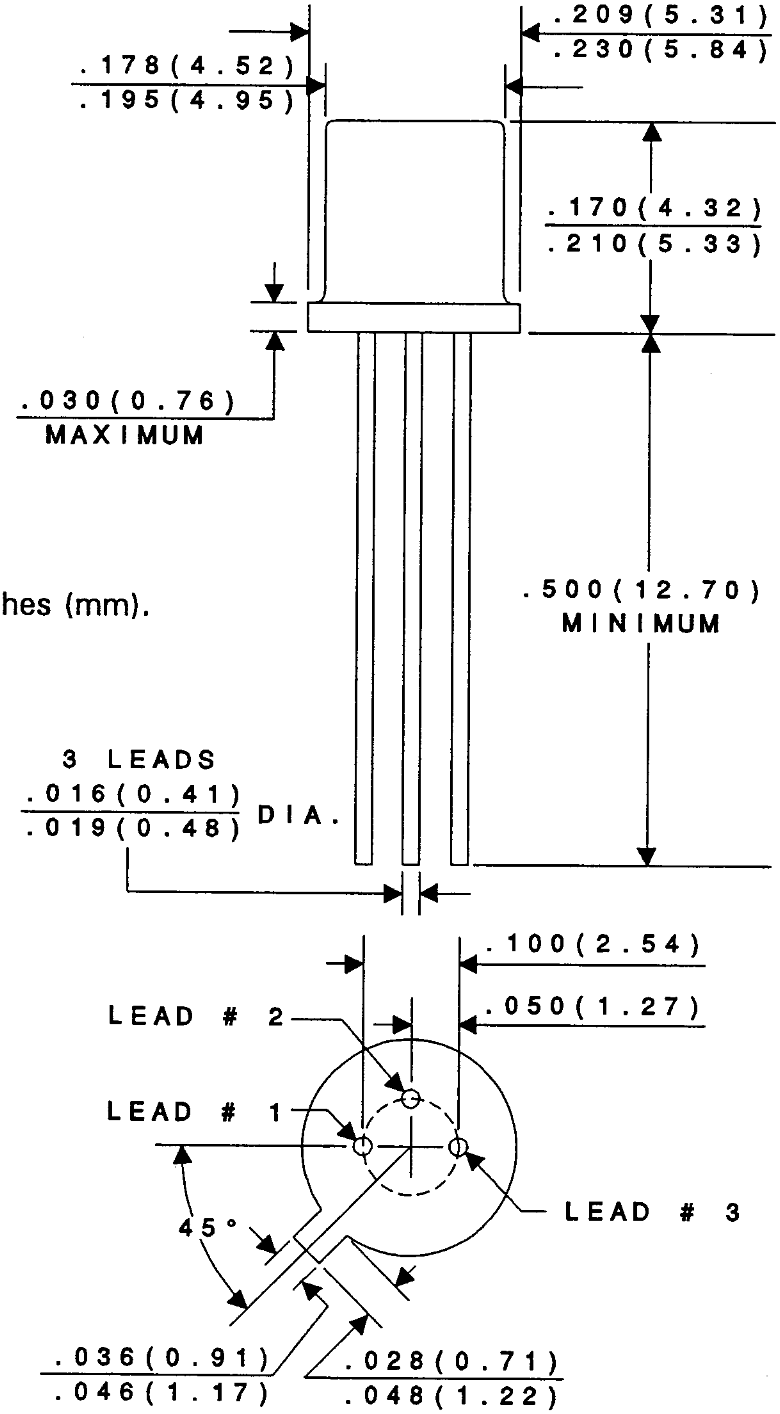
	SYMBOL		UNITS
Drain-Gate Voltage	V_{DG}	50	V
Gate-Source Voltage	V_{GS}	50	V
Gate Current	I_G	10	mA
Power Dissipation	P_D	300	mW
Storage Temperature	T_{stg}	-65 to +175	°C

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

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

(OVER)

JEDEC TO-18 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).

LEAD CODE:

1) SOURCE
2) DRAIN
3) GATE

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