
2N5457, 2N5458

JFETs - General Purpose

N-Channel – Depletion

N-Channel Junction Field Effect Transistors, depletion mode (Type A) designed for audio and switching applications.

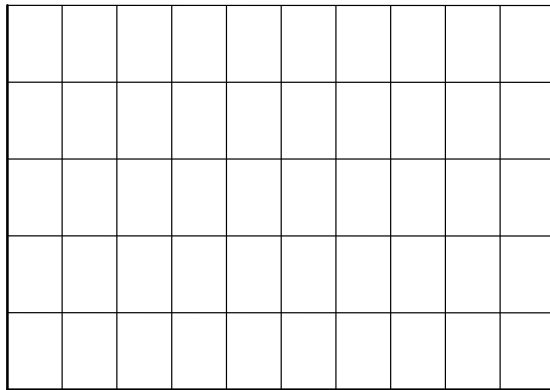
Features

2N5457, 2N5458

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

Characteristic		Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS						
Gate–Source Breakdown Voltage ($I_G = -10\ \mu\text{Adc}$, $V_{DS} = 0$)		$V_{(BR)GSS}$	-25	–	–	Vdc
Gate Reverse Current ($V_{GS} = -15\ \text{Vdc}$, $V_{DS} = 0$) ($V_{GS} = -15\ \text{Vdc}$, $V_{DS} = 0$, $T_A = 100^\circ\text{C}$)		I_{GSS}	– –	– –	-1.0 –200	nAdc
Gate–Source Cutoff Voltage ($V_{DS} = 15\ \text{Vdc}$, $i_D = 10\ \text{nAdc}$)	2N5457 2N5458	$V_{GS(off)}$	-0.5 –1.0	– –	–6.0 –7.0	Vdc
Gate–Source Voltage ($V_{DS} = 15\ \text{Vdc}$, $i_D = 100\ \mu\text{Adc}$) ($V_{DS} = 15\ \text{Vdc}$, $i_D = 200\ \mu\text{Adc}$)	2N5457 2N5458	V_{GS}	– –	–2.5 –3.5	– –	Vdc
ON CHARACTERISTICS						
Zero–Gate–Voltage Drain Current (Note 1) ($V_{DS} = 15\ \text{Vdc}$, $V_{GS} = 0$)	2N5457 2N5458	I_{DSS}	1.0 2.0	3.0 6.0	5.0 9.0	mAdc
DYNAMIC CHARACTERISTICS						
Forward Transfer Admittance (Note 1) ($V_{DS} = 15\ \text{Vdc}$, $V_{GS} = 0$, $f = 1\ \text{kHz}$)	2N5457 2N5458	$ Y_{fs} $	1000 1500	3000		

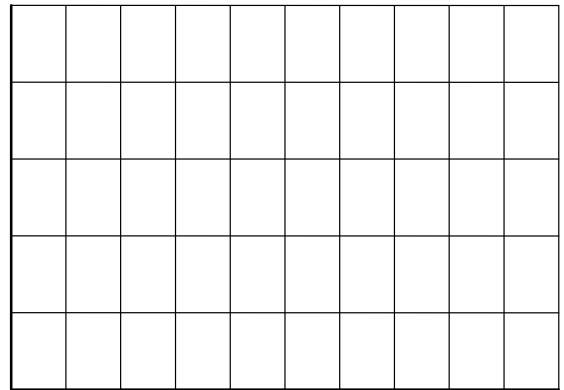
2N5457, 2N5458



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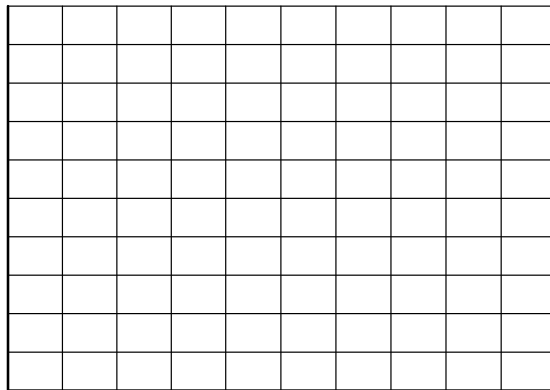
V_{DS} , DRAIN-SOURCE VOLTAGE (VOLTS)

Figure 4. Typical Drain Characteristics



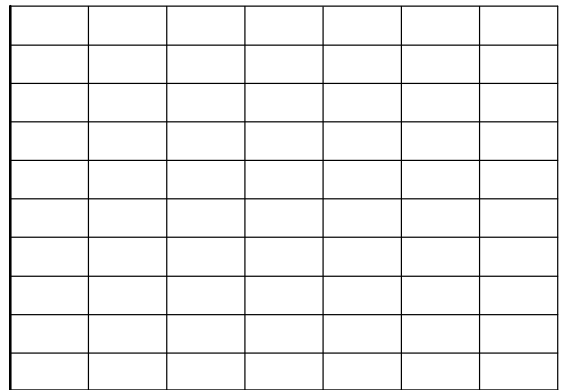
V_{GS} , GATE-SOURCE VOLTAGE (VOLTS)

Figure 5. Common Source Transfer Characteristics



V_{DS} , DRAIN-SOURCE VOLTAGE (VOLTS)

Figure 6. Typical Drain Characteristics

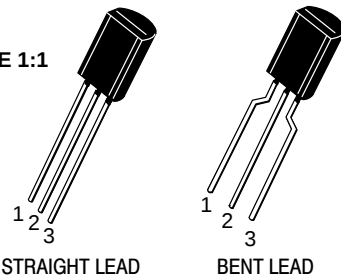


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V_{GS} , GATE - SOURCE VOLTAGE (VOLTS)

Figure 7. Common Source Transfer Characteristics

SCALE 1:1

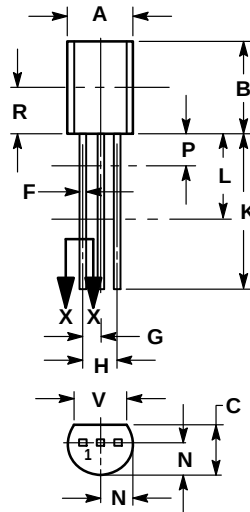


STRAIGHT LEAD

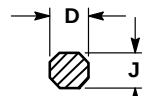
BENT LEAD

TO-92 (TO-226) 1 WATT
CASE 29-10
ISSUE A

DATE 08 MAY 2012



STRAIGHT LEAD

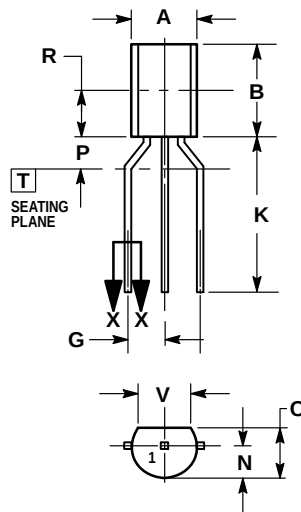


SECTION X-X

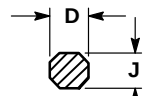
NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1994.
2. CONTROLLING DIMENSION: INCHES.
3. CONTOUR OF PACKAGE BEYOND DIMENSION R IS UNCONTROLLED.
4. DIMENSION F APPLIES BETWEEN DIMENSIONS P AND L. DIMENSIONS D AND J APPLY BETWEEN DIMENSIONS L AND K MINIMUM. THE LEAD DIMENSIONS ARE UNCONTROLLED IN DIMENSION P AND BEYOND DIMENSION K MINIMUM.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.175	0.205	4.44	5.21
B	0.290	0.310	7.37	7.87
C	0.125	0.165	3.18	4.19
D	0.018	0.021	0.46	0.53
F	0.016	0.019	0.41	0.48
G	0.045	0.055	1.15	1.39
H	0.095	0.105	2.42	2.66
J	0.018	0.024	0.46	0.61
K	0.500	---	12.70	---
L	0.250	---	6.35	---
N	0.080	0.105	2.04	2.66
P	---	0.100	---	2.54
R	0.135	---	3.43	---
V	0.135	---	3.43	---



BENT LEAD



SECTION X-X

NOTES:

1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
2. CONTROLLING DIMENSION: INCHES.
3. CONTOUR OF PACKAGE BEYOND DIMENSION R IS UNCONTROLLED.
4. DIMENSION F APPLIES BETWEEN DIMENSIONS P AND L. DIMENSIONS D AND J APPLY BETWEEN DIMENSIONS L AND K MINIMUM. THE LEAD DIMENSIONS ARE UNCONTROLLED IN DIMENSION P AND BEYOND DIMENSION K MINIMUM.

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B	0.290	0.310	7.37	7.87
C	0.125	0.165	3.18	4.19
D	0.018	0.021	0.46	0.53
G	0.094	0.102	2.40	2.80
J	0.018	0.024	0.46	0.61
K	0.500	---	12.70	---
N	0.080	0.105	2.04	2.66
P	---	0.100	---	2.54
R	0.135	---	3.43	---

STYLES ON PAGE 2

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