

2N5457  
2N5458  
2N5459

SILICON  
N-CHANNEL JFETS



www.centrasemi.com

The CENTRAL SEMICONDUCTOR 2N5457, 2N5458, and 2N5459 are silicon N-Channel JFETs designed for switching and amplifier applications.



TO-92 CASE

MARKING: FULL PART NUMBER

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

Drain-Source Voltage  
Drain-Gate Voltage  
Gate-Source Voltage  
Continuous Gate Current  
Power Dissipation  
Operating and Storage Junction Temperature

**SYMBOL**

$V_{DS}$  25  
 $V_{DG}$  25  
 $V_{GS}$  25  
 $I_G$  10  
 $P_D$  310  
 $T_J, T_{stg}$  -65 to +150

**UNITS**

V  
V  
V  
mA  
mW  
 $^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	2N5457		2N5458		2N5459		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
$I_{GSS}$	$V_{GS}=15\text{V}$	-	1.0	-	1.0	-	1.0	nA
$I_{GSS}$	$V_{GS}=15\text{V}, T_A=100^\circ\text{C}$	-	200	-	200	-	200	nA
$I_{DSS}$	$V_{DS}=15\text{V}$	1.0	5.0	2.0	9.0	4.0	16	mA
$BV_{GSS}$	$I_G=10\mu\text{A}$	25	-	25	-	25	-	V
$V_{GS(OFF)}$	$V_{DS}=15\text{V}, I_D=10\text{nA}$	0.5	6.0	1.0	7.0	2.0	8.0	V
$C_{rss}$	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$	-	3.0	-	3.0	-	3.0	pF
$C_{iss}$	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{MHz}$	-	7.0	-	7.0	-	7.0	pF
$g_{fs}$	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$	1.0K	5.0K	1.5K	5.5K	2.0K	6.0K	$\mu\text{S}$
$g_{os}$	$V_{DS}=15\text{V}, V_{GS}=0, f=1.0\text{kHz}$	-	50	-	50	-	50	$\mu\text{S}$

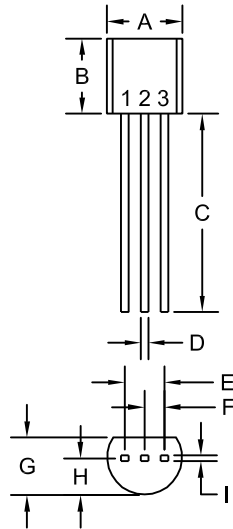
R1 (6-March 2014)

2N5457  
 2N5458  
 2N5459

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TO-92 CASE - MECHANICAL OUTLINE



R1

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
I	0.015		0.38	

TO-92 (REV: R1)

LEAD CODE:

- 1) Drain
- 2) Source
- 3) Gate

MARKING:  
 FULL PART NUMBER

R1 (6-March 2014)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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