2N5457 2N5458 2N5459

SILICON N-CHANNEL JFETS



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



MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Drain-Source Voltage	$V_{DS}$	25	V
Drain-Gate Voltage	$V_{DG}$	25	V
Gate-Source Voltage	$V_{GS}$	25	V
Continuous Gate Current	$I_{G}$	10	mA
Power Dissipation	$P_{D}$	310	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C

 $\textbf{ELECTRICAL CHARACTERISTICS:} \ (T_{\mbox{\scriptsize A}} = 25^{\circ}\mbox{C unless otherwise noted})$ 

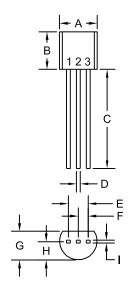
	<u>2N5457</u>		2N5458		2N5459			
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	UNITS
I <sub>GSS</sub>	V <sub>GS</sub> =15V	-	1.0	-	1.0	-	1.0	nA
I <sub>GSS</sub>	V <sub>GS</sub> =15V, T <sub>A</sub> =100°C	-	200	-	200	-	200	nA
IDSS	V <sub>DS</sub> =15V	1.0	5.0	2.0	9.0	4.0	16	mA
BVGSS	I <sub>G</sub> =10μA	25	-	25	-	25	-	V
V <sub>GS(OFF)</sub>	V <sub>DS</sub> =15V, I <sub>D</sub> =10nA	0.5	6.0	1.0	7.0	2.0	8.0	V
C <sub>rss</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0MHz	-	3.0	-	3.0	-	3.0	pF
C <sub>iss</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0MHz	-	7.0	-	7.0	-	7.0	pF
9 <sub>fs</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0kHz	1.0K	5.0K	1.5K	5.5K	2.0K	6.0K	μS
9 <sub>os</sub>	$V_{DS}$ =15V, $V_{GS}$ =0, f=1.0kHz	-	50	-	50	-	50	μS

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# **TO-92 CASE - MECHANICAL OUTLINE**



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

TO-92 (REV: R1)

# LEAD CODE:

- 1) Drain 2) Source
- 3) Gate

R1

# MARKING:

**FULL PART NUMBER** 

## **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



### 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

#### **DESIGNER SUPPORT/SERVICES**

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

- Free guick 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

## 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).

## **CONTACT US**

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