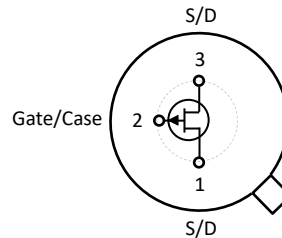


2N2608, 2N2609 P-Channel JFET JAN equivalent products

Features

- InterFET [P0032F Geometry](#)
- Low gate leakage: 750fA typical @20V
- Low Ciss: 3pF typical
- Typical noise: 2.0 nV/√Hz
- Typical gain: 2mS
- Low cutoff voltage: -1.0V typical
- Typical I_{SS}: 12mA
- Typical BV_{GSS}: -35V
- High radiation tolerance
- RoHS, REACH, CMR compliant
- Custom test and binning options available
- Edge case SPICE modeling: [InterFET SPICE](#)

TO-18 Bottom View



Industry Standard Crosses

- 2N6451

Built to MIL-PRF-19500

InterFET Similar Parts

- 2N5020-1, 2N5460-1-2, 2N3330-1, 2N5460-1-2
- IFP5020A, IFP5020B

(Source and Drain are interchangeable)

Applications

- General: Amplifiers; Switches; Voltage regulators; Oscillators; Signal mixers; Noise generators
- Military/Aero: Radar; Communications; Satellites; Missiles guidance; Hydrophone preamplifiers
- Medical: Medical imaging systems; Medical monitors and recorders; Ultrasound equipment
- Audio: Tone control circuits; Headphone amplifiers; Audio filters; Electret Microphone

Description

The 30V InterFET 2N2608 and 2N2609 are targeted for data switches and low-level chopper designs. Gate leakages are typically less than 1nA at room temperature (25°C). The TO-18 package is hermetically sealed and suitable for military applications.

Ordering Information

Part Number	Description	Case	Packaging
2N2608JANequiv, 2N2609JANequiv	JAN equivalent	TO-18	Bulk
2N2608JANTXequiv, 2N2609JANTXequiv	JANTX equivalent	TO-18	Bulk
2N2608JANTXVequiv, 2N2609JANTXVequiv	JANTXV equivalent	TO-18	Bulk
2N2608JANSequiv, 2N2609JANSequiv	JANS equivalent	TO-18	Bulk



NOTICE: Please refer to the end of this document for information on product materials, compliance, safety, and legal statements.

Electrical Characteristics

Maximum Ratings (@ $T_A = 25^\circ\text{C}$, Unless otherwise specified)

Parameters	Value	Unit
V_{RGS} Reverse Gate Source and Gate Drain Voltage	30	V
I_{FG} Continuous Forward Gate Current	-10	mA
P_D Continuous Device Power Dissipation	300	mW
P Power Derating	2	mW/ $^\circ\text{C}$
T_J Operating Junction Temperature	-55 to 125	$^\circ\text{C}$
T_{STG} Storage Temperature	-65 to 150	$^\circ\text{C}$

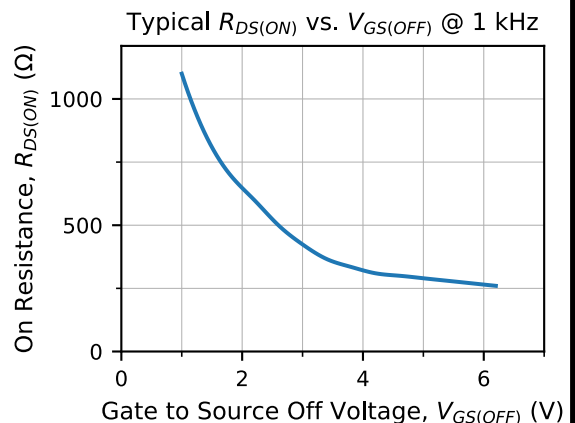
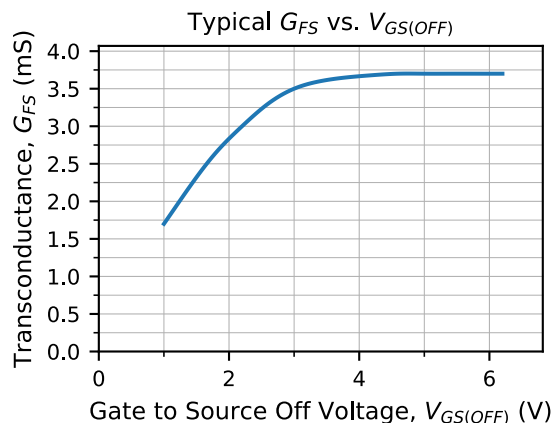
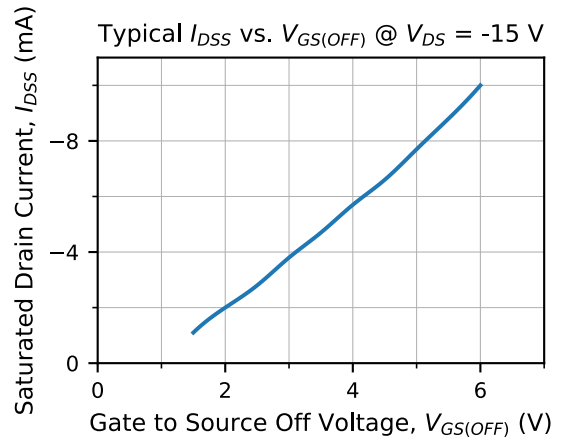
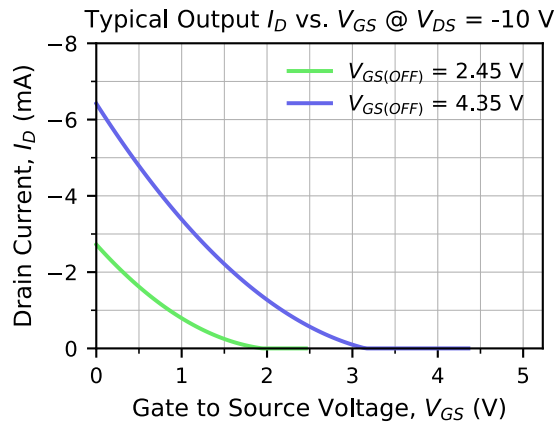
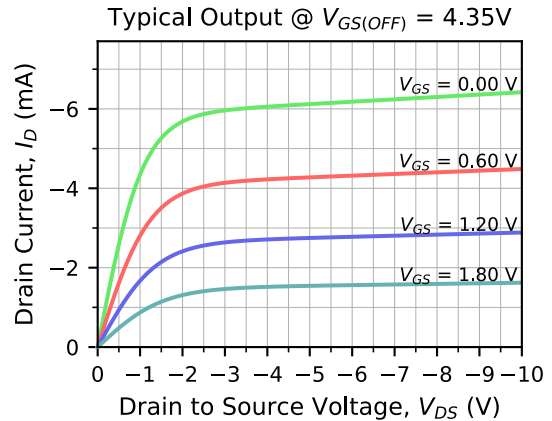
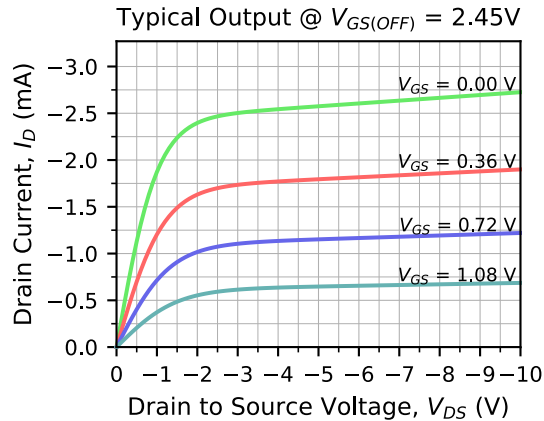
Static Characteristics (@ $T_A = 25^\circ\text{C}$, Unless otherwise specified)

Parameters	Conditions	2N2608		2N2609		Unit
		Min	Max	Min	Max	
$V_{(BR)GSS}$ Gate to Source Breakdown Voltage	$V_{DS} = 0V, I_G = 1\mu A$	30		30		V
I_{GSS} Gate to Source Reverse Current	$V_{GS} = 5V, V_{DS} = 0V$		10		10	nA
$V_{GS(OFF)}$ Gate to Source Cutoff Voltage	$V_{DS} = -5V, I_D = -1nA$	1	4	1	4	V
I_{DSS} Drain to Source Saturation Current	$V_{GS} = 0V, V_{DS} = -5V$ (Pulsed)	-0.9	-4.5	-2	-10	mA

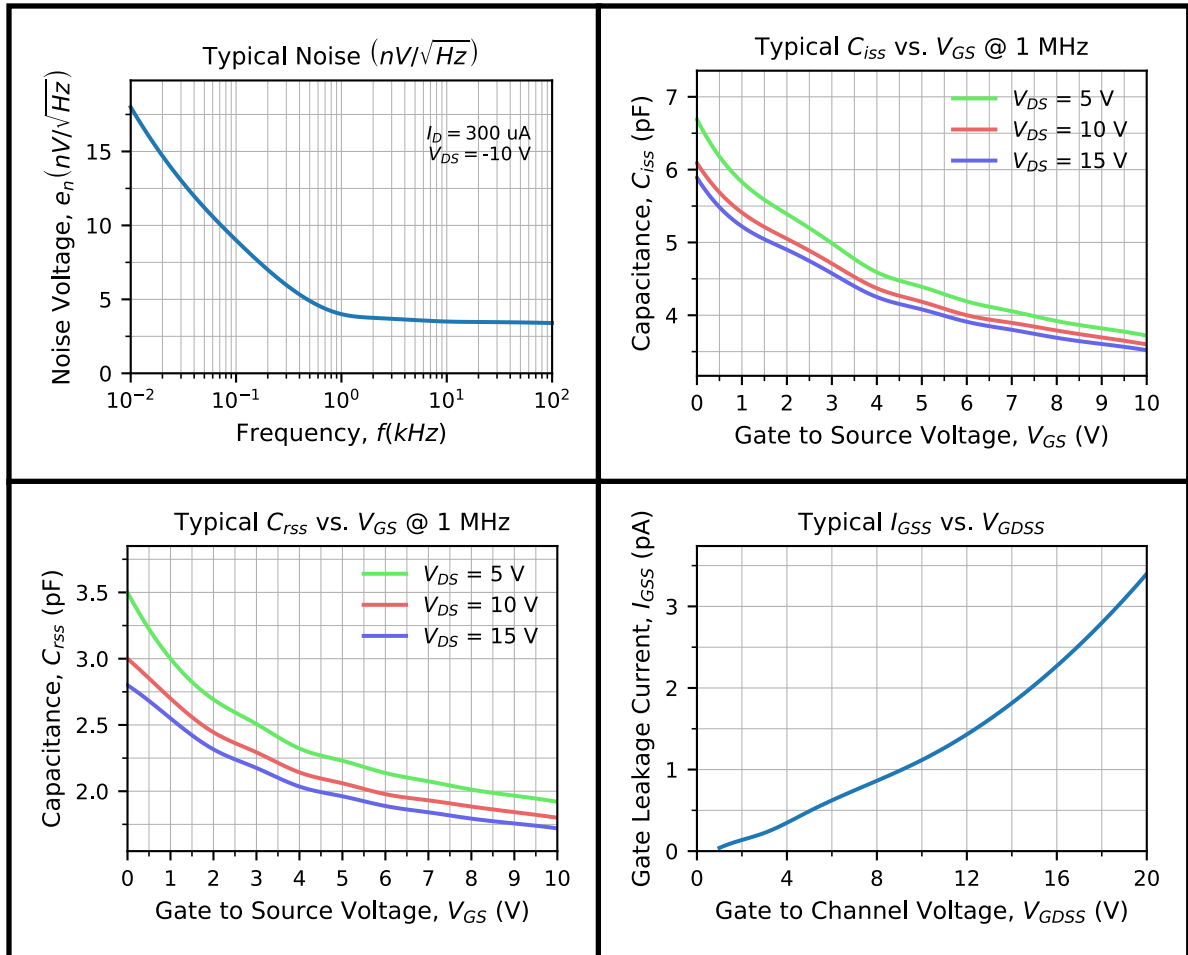
Dynamic Characteristics (@ $T_A = 25^\circ\text{C}$, Unless otherwise specified)

Parameters	Conditions	2N2608		2N2609		Unit
		Min	Max	Min	Max	
G_{FS} Forward Transconductance	$V_{DS} = -5V, V_{GS} = 0V, f = 1kHz$	1000		2500		μS
C_{iss} Input Capacitance	$V_{DS} = -5.4V, V_{GS} = 1V, f = 1MHz$		17		30	pF

Typical 2N2608-9 Characteristics

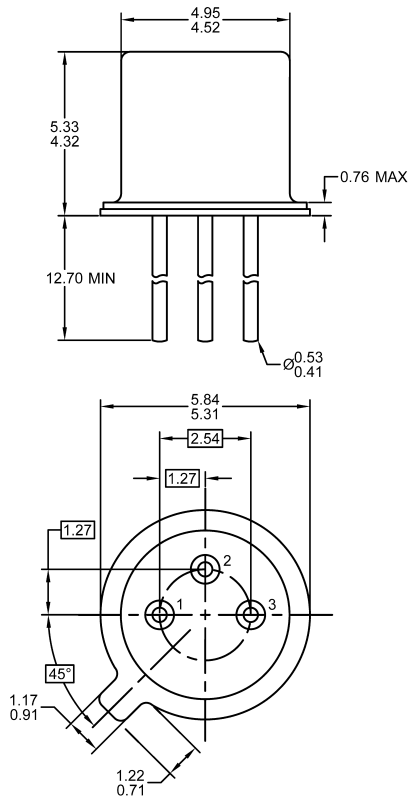


Typical 2N2608-9 Characteristics (Continued)



TO-18 Mechanical and Layout Data

Package Outline Data



1. All linear dimensions are in millimeters.
2. Package weight approximately 0.29 grams
3. Bulk product is shipped in standard ESD shipping material
4. Refer to JEDEC standards for additional information.



Compliance and Legal

Environment

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