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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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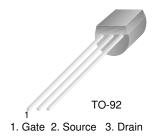






BF247A N-Channel Amplifier

- · This device is designed primarily for electronic switching applications such as low on resistance analog switching.
- Sourced from process 51.



Absolute Maximum Ratings* T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{DG}	Drain-Gate Voltage	25	V
V_{GS}	Gate-Source Voltage	-25	V
I _{GF}	Forward Gate Current	10	mA
T _J , T _{STG}	Operating and Storage Junction Temperature Range	-55 ~ +150	°C

^{*} This ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Max.	Units
P _D	Total Device Dissipation	350	mW
	Derate above 25°C	2.8	mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	125	°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	357	°C/W

Electrical Characteristics* Ta=25°C unless otherwise noted Parameter

Off Characteristics					
V _{(BR)GSS}	Gate-Source Breakdown Voltage	$I_G = 1.0 \mu A, V_{DS} = 0$	-25		V
I _{GSS}	Gate Reverse Current	V _{GS} = 15V, V _{DS} = 0		-5.0	nA
V _{GS(off)}	Gate-Source Cut-off Voltage	V _{DS} = 15V, I _D = 100nA	-0.6	-14.5	V
V _{GS}	Gate-Source Forward Voltage	$V_{DS} = 15V, I_D = 0.2mA$	-1.5	-4.0	V

Test Condition

Min.

Max.

Units

On Characteristics

Symbol

	*I _{DSS}	Zero-Gate Voltage Drain Current *	$V_{DS} = 15V, V_{GS} = 0$	30	80	mA
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Small Signal Characteristics

gfs Forward Transferconductance $V_{DS} = 15V, V_{GS} = 0V$ 8	fs	$/\Omega$
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¹⁾ These rating are based on a maximum junction temperature of 150 degrees C.

²⁾ These are steady limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

^{*} Pulse Test: Pulse Width ≤ 300μs, Duty Cycle = 2%





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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve design.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.

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