# imall

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### BF246B N-Channel Switch

• This device is designed for low level analog switching, sample and hold circuits and chopper stabalized amplifiers.

• Sourced from process 51.

• See J111 for characteristics.



#### Absolute Maximum Ratings\* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>DG</sub>	Drain-Gate Voltage	25	V
V <sub>GS</sub>	Gate-Source Voltage	-25	V
I <sub>GF</sub>	Forward Gate Current	50	mA
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Junction Temperature Range	-55 ~ 150	۵°

\* These ratings are limiting values above which the serviceability of any semiconductor device may e impaired.

Notes:

1. These ratings are based on a maximum junction temperature of 150 degrees C.

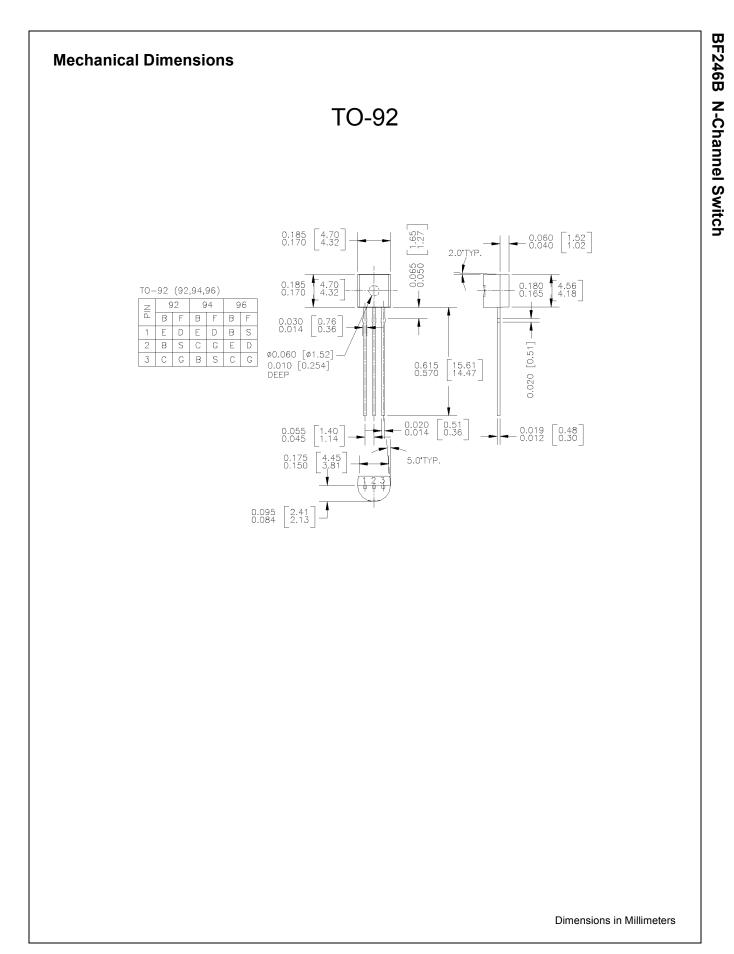
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

#### Electrical Characteristics T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units		
Off Characteristics							
V <sub>(BR)GSS</sub>	Gate-Source Breakdown Voltage	$I_{\rm G}$ = 1.0µA, $V_{\rm DS}$ = 0	-25		V		
I <sub>GSS</sub>	Gate Reverse Current	V <sub>GS</sub> = -15V, V <sub>DS</sub> = 0		-5.0	nA		
V <sub>GS(off)</sub>	Gate-Source Cutoff Voltage	V <sub>DS</sub> = 15V, I <sub>D</sub> = 10nA	-0.6	-14.5	V		
On Characteristics*							
I <sub>DSS</sub>	Zero-Gate Voltage Drain Current *	V <sub>DS</sub> = 15V, V <sub>GS</sub> = 0	60	140	mA		

#### Thermal Characteristics T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P <sub>D</sub>	Total Device Dissipation	625 5.0	mW mW/°C
$R_{ extsf{ heta}JC}$	Thermal Resistance, Junction to Case	125	°C/W
$R_{ extsf{ heta}JA}$	Thermal Resistance, Junction to Ambient	357	°C/W



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#### **Definition of Terms**

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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 in order to improve design.
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