

# New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.  
SPRINGFIELD, NEW JERSEY 07081  
U.S.A.

TELEPHONE: (973) 376-2922  
(212) 227-6005  
FAX: (973) 376-8960

## BF256A/BF256B/BF256C

### N-Channel RF Amplifiers

- This device is designed for VHF/UHF amplifiers.
- Sourced from process 50.



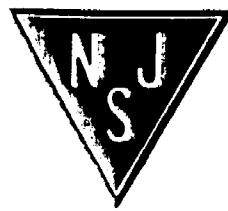
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1. Gate 2. Source 3. Drain

### Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$V_{DG}$	Drain-Gate Voltage	30	V
$V_{GS}$	Gate-Source Voltage	-30	V
$I_{GF}$	Forward Gate Current	10	mA
$P_D$	Total Device Dissipation @ $T_A=25^\circ\text{C}$ Derate above $25^\circ\text{C}$	350 2.8	mW mW/ $^\circ\text{C}$
$T_{STG}$	Operating and storage Temperature Range	-55 ~ 150	$^\circ\text{C}$

### Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
<b>Off Characteristics</b>					
$V_{(BR)GSS}$	Gate-Source Breakdown Voltage	$V_{DS} = 0$ , $I_G = 1\mu\text{A}$	-30		V
$V_{GS}$	Gate-Source	$V_{DS} = 15\text{V}$ , $I_D = 200\mu\text{A}$	-0.5	-7.5	V
$V_{GS(\text{off})}$	Gate-Source Cutoff Voltage	$V_{DS} = 15\text{V}$ , $I_D = 10\text{nA}$	-0.5	-8	V
$I_{GSS}$	Gate Reverse Current	$V_{GS} = -20\text{V}$ , $V_{GS} = 0$		-5	nA
<b>On Characteristics</b>					
$I_{DSS}$	Zero-Gate Voltage Drain Current BF256A BF256B BF256C	$V_{GS} = 15\text{V}$ , $V_{GS} = 0$	3 6 11	7 13 18	mA
<b>Small Signal Characteristics</b>					
$g_{fs}$	Common Source Forward Transconductance	$V_{DS} = 15\text{V}$ , $V_{GS} = 0$ , $f = 1\text{KHz}$	4.5		mmhos



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