

BF256A

BF256A is a Preferred Device

JFET - General Purpose

N-Channel

N-Channel Junction Field Effect Transistor designed for VHF and UHF applications.

- Low Cost TO-92 Type Package
- Forward Transfer Admittance, $Y_{fs} = 4.5$ mmhos (Min)
- Transfer Capacitance – $C_{RSS} = 0.7$ (Typ)
- Power Gain at $f = 800$ MHz, Typ. = 11 dB

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	30	Vdc
Drain-Gate Voltage	V_{DG}	30	Vdc
Gate-Source Voltage	V_{GS}	30	Vdc
Forward Gate Current	$I_{G(f)}$	10	mAdc
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	360 2.88	mW mW/ $^\circ\text{C}$
Operating and Storage Channel Temperature Range	$T_{channel}$, T_{stg}	-65 to +150	$^\circ\text{C}$

1
2
3

TO-92
CASE 29
STYLE 5

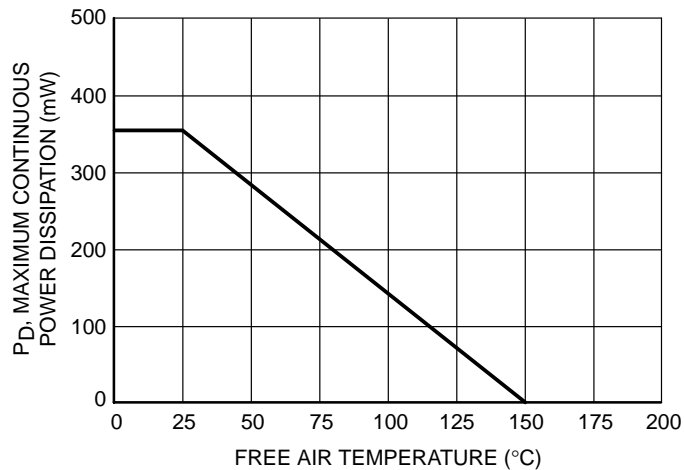


Figure 1. Power Derating Curve

ORDERING INFORMATION

Device	Package	Shipping
BF256A	TO-92	5000 Units/Box

BF256A

DC CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
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DC CHARACTERISTICS

Drain-Source Breakdown Voltage	$(-I_G = -1.0 \mu\text{A}, V_{DS} = 0)$	$-V_{(BR)GSS}$	30	—	—	Vdc
Drain-Source Voltage	$(V_{DS} = 15 \text{ Vdc}, I_D = 200 \mu\text{A})$	$-V_{GS}$	0.5	—	7.5	Vdc
Reverse Current	$(-V_{GS} = 20 \text{ Vdc}, V_{DS} = 0)$	$-I_{GSS}$	—	—	5.0	nAdc

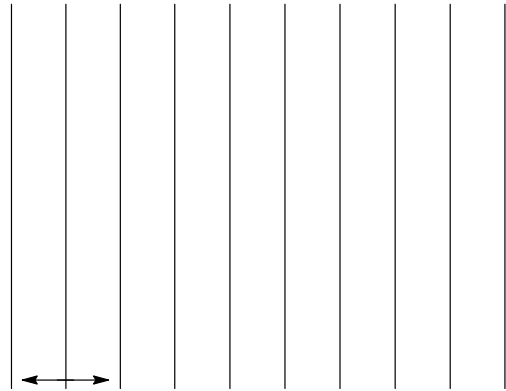
DC CHARACTERISTICS

Zero-Voltage Drain Current (Note 1.)	$(V_{DS} = 15 \text{ Vdc}, V_{GS} = 0)$	I_{DSS}	3.0	—	7.0	mAdc
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SIGNAL CHARACTERISTICS

Transfer Admittance	$(V_{DS} = 15 \text{ Vdc}, V_{GS} = 0, f = 1 \text{ kHz})$	$ Y_{fs} $	4.5	5.0	—	mmhos
Transfer Capacitance	$(V_{DS} = 20 \text{ Vdc}, -V_{GS} = 1 \text{ Vdc}, f = 1 \text{ MHz})$	C_{rss}	—	0.7	—	pF
Output Capacitance	$(V_{DS} = 20 \text{ Vdc}, V_{GS} = 0, f = 1 \text{ MHz})$	C_{oss}	—	1.0	—	pF
Resonant Frequency (Note 2.)	$(V_{DS} = 15 \text{ Vdc}, V_{GS} = 0)$	f_{gfs}	—	1000	—	MHz

Note 1: Pulse Width = 300 μs , Duty Cycle = 2.0%.
 Note 2: Frequency at which f_{gfs} is 0.7 of its value at 1 KHz.



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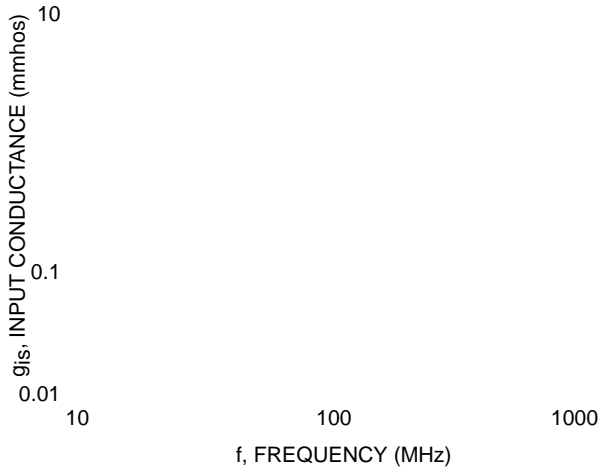
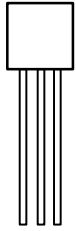


Figure 4. Input Admittance versus Frequency

BF256A

PACKAGE DIMENSIONS

TO-92 (TO-226)
CASE 29-11
ISSUE AL



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. CONTOUR OF PACKAGE BEYOND DIMENSION R IS UNCONTROLLED.
4. LEAD DIMENSION IS UNCONTROLLED IN P AND BEYOND DIMENSION K MINIMUM.