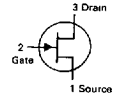


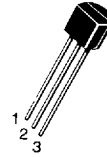
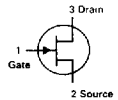
BF244A,B

CASE 29-04, STYLE 22
TO-92 (TO-226AA)



BF245A,B,C

CASE 29-04, STYLE 23
TO-92 (TO-226AA)



JFET
VHF/UHF AMPLIFIERS

N-CHANNEL - DEPLETION

Refer to 2N5484 for graphs.

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
Drain Current	I _D	100	mAdc
Forward Gate Current	I _{G(f)}	10	mAdc
Total Device Dissipation @ T _A = 25°C Derate above 25°C	P _D	350 2.8	mW mW/°C
Storage Channel Temperature Range	T _{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS					
Gate-Source Breakdown Voltage (I _G = 10 μAdc, V _{DS} = 0)	V _{(BR)GSS}	30	—	—	V
Gate-Source (V _{DS} = 15 Vdc, I _D = 200 μA)	V _{GS}	0.4 0.4 1.6 3.2	— — — —	7.5 2.2 3.8 7.5	V
BF245 (1), BF244 (2) BF245A, BF244A BF245B, BF244B BF245C					
Gate-Source Cutoff Voltage (V _{DS} = 15 Vdc, I _D = 10 nA)	V _{GS(off)}	-0.5	—	-8	V
Gate Reverse Current (V _{GS} = 20 Vdc, V _{DS} = 0)	I _{GSS}	—	—	5	nA
ON CHARACTERISTICS					
Zero-Gate Voltage Drain Current (V _{DS} = 15 Vdc, V _{GS} = 0)	I _{DSS}	2 2 6 12	— — — —	25 6.5 15 25	mA
BF245 (1), BF244 (2) BF245A, BF244A BF245B, BF244B BF245C					

SMALL-SIGNAL CHARACTERISTICS

Forward Transfer Admittance (V _{DS} = 15 Vdc, V _{GS} = 0, f = 1 KHz)	Y _{fs}	3.0	—	6.5	mmhos
Output Admittance (V _{DS} = 15 Vdc, V _{GS} = 0, f = 1 KHz)	Y _{os}	—	40	—	μmhos
Forward Transfer Admittance (V _{DS} = 15 Vdc, V _{GS} = 0, f = 200 MHz)	Y _{fs}	—	5.6	—	mmhos
Reverse Transfer Admittance (V _{DS} = 15 Vdc, V _{GS} = 0, f = 200 MHz)	Y _{rs}	—	1.0	—	mmhos
Input Capacitance (V _{DS} = 20 Vdc, -V _{GS} = 1 Vdc)	C _{iss}	—	3	—	pF
Reverse Transfer Capacitance (V _{DS} = 20 Vdc, -V _{GS} = 1 Vdc, f = 1 MHz)	C _{rss}	—	0.7	—	pF
Output Capacitance (V _{DS} = 20 Vdc, -V _{GS} = 1 Vdc, f = 1 MHz)	C _{oss}	—	0.9	—	pF
Noise Figure (V _{DS} = 15 Vdc, V _{GS} = 0, R _G = 1 KΩ, f = 100 MHz)	N _F	—	1.5	—	db
Cut-off Frequency(3) (V _{DS} = 15 Vdc, V _{GS} = 0)	F _(Yfs)	—	700	—	MHz

(1) On orders against the BF245, any or all subgroups might be shipped.

(2) On orders against the BF244, any or all subgroups might be shipped.

(3) The frequency at which g_{fs} is 0.7 of its value at 1 KHz.