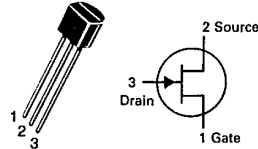


6367254 MOTOROLA SC (XSTRS/R F)

96D 82624 D

T-31-25

BF256,A,B,CCASE 29-04, STYLE 23
TO-92 (TO-226AA)**JFET**
VHF/UHF AMPLIFIER

N-CHANNEL - DEPLETION

Refer to 2N4416 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	360 2.88	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 = 1.0 μAdc, V _{DS} = 0)	V _{(BR)GSS}	30	—	—	Vdc
Gate-Source Voltage (V _{DS} = 15 Vdc, I _D = 200 μA)	V _{GS(off)}	0.5	—	7.5	Vdc
Gate Reverse Current (V _{GS} = 20 Vdc, V _{DS} = 0)	I _{GSS}	—	—	5	nAdc
ON CHARACTERISTICS					
Zero-Gate Voltage Drain Current (V _{DS} = 15 Vdc, V _{GS} = 0)	I _{DSS}				mAdc
	BF256(1)	3	—	18	
	BF256A	3	—	7	
	BF256B	6	—	13	
	BF256C	11	—	18	
SMALL-SIGNAL CHARACTERISTICS					
Forward Transfer Admittance (V _{DS} = 15 Vdc, V _{GS} = 0, f = 1 kHz)	Y _{fs}	4.5	5	—	mmhos
Reverse Transfer Capacitance (V _{DS} = 20 Vdc, -V _{GS} = 1Vdc, f = 1 MHz)	C _{rss}	—	0.7	—	pF
Output Capacitance (V _{DS} = 20 Vdc, V _{GS} = 0, f = 1 MHz)	C _{oss}	—	1.0	—	pF
Noise Figure (V _{DS} = 10 Vdc, R _S = 47Ω, f = 800 MHz)	N _F	—	7.5	—	db
Cut-off Frequency(2) (V _{DS} = 15 Vdc, V _{GS} = 0)	f _{gfs}	—	1000	—	MHz
Power Gain (V _{DS} = 15 Vdc, R _S = 47 Ω, f = 800 MHz)	G _p	—	11	—	dB

(1) On orders against the BF256, any or all subgroups might be shipped.

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