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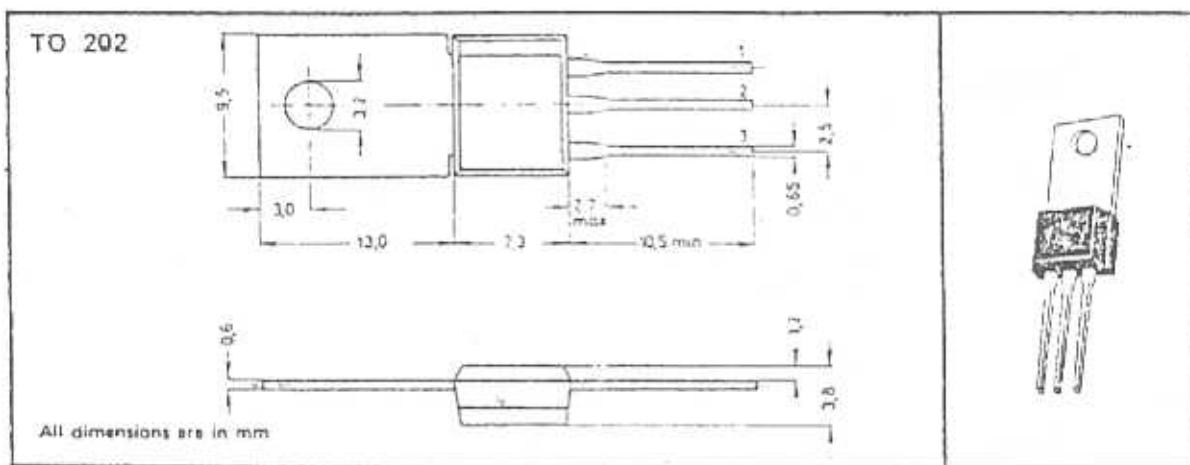
N-CHANNEL JUNCTION FIELD EFFECT TRANSISTOR

APPLICATION: o VHF Amplifiers, Drivers, Oscillators
o Large signal mixers

MFon → 2N4756
Silent → BF2471

ADVANTAGES: o High output voltage
o Low intermodulation
o Simple circuit and device mounting

mechanical data



1= Drain 2= Gate 3= Source Gate electrically connected to heat-sink

ABSOLUTE MAXIMUM RATINGS AT 25°C FREE-AIR TEMPERATURE (UNLESS OTHERWISE NOTED)

Drain-Gate Voltage	30 V
Drain-Source Voltage	± 30 V
Gate-Source Voltage	- 30 V
Forward Gate Current	10mA
Continuous Device Dissipation at (or below) 25°C	
Free-Air Temperature (see note 2)	2 W
Continuous Device Dissipation at (or below) 25°C	
Case Temperature (see note 3)	5 W
Storage Temperature Range	-55°C to 150°C
Lead Temperature 1.6mm from Case for 10 Seconds	260°C

- NOTES: 1. This value applies when the base-emitter diode is open circuited.
2. Derate linearly to 150°C Free-Air Temperature at the rate of 16mW/°C.
3. Derate linearly to 150°C Case Temperature at the rate of 40mW/°C.

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Electrical characteristics at 25°C free-air temperature
(unless otherwise noted)

	PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNIT
$V_{(BR)GSS}$	Gate-Source Breakdown Voltage	$I_C = -1\mu A, V_{DS} = 0$	30			V
I_{GSS}	Gate-Leakage Current	$V_{GS} = -15 V, V_{DS} = 0$		10	nA	
I_{DSS}	Zero-Gate-Voltage Drain Current	$V_{DS} = 10 V, V_{GS} = 0$	30	140	mA	
V_{GS}	Gate-Source Voltage	$V_{DS} = 10 V, I_D = 20mA$		4		V
$I_{D(off)}$	Drain-Cutoff Current	$V_{DS} = 10 V, V_{GS} = -10 V$		10	nA	
$ Y_{fs} $	Common-Source Forward Transfer Admittance	$V_{DS} = 10 V, V_{GS} = 0$ $f = 1KHz$	15	25		mS
$ Y_{ig} $	Common-Gate Input Admittance	$V_{DS} = 10 V, I_D = 20mA$	16			mS
$ Y_{fg} $	Common-Gate Forward Transfer Admittance	$V_{DS} = 10 V, I_D = 20mA$	17			mS
G_p	Power-Gain	$I_D = 30mA, f = 200MHz$ (fig. 1)	11			dB
U_a	Output-Voltage DIN 45004	$R_L = 75 \Omega, f = 200MHz$	5.3			V
G_p	Power-Gain	$I_D = 30mA, f = 600MHz$ (fig. 2)	9			dB
U_a	Output-Voltage DIN 45004	$R_L = 75 \Omega, f = 600MHz$ (fig. 2)	2.8			dB

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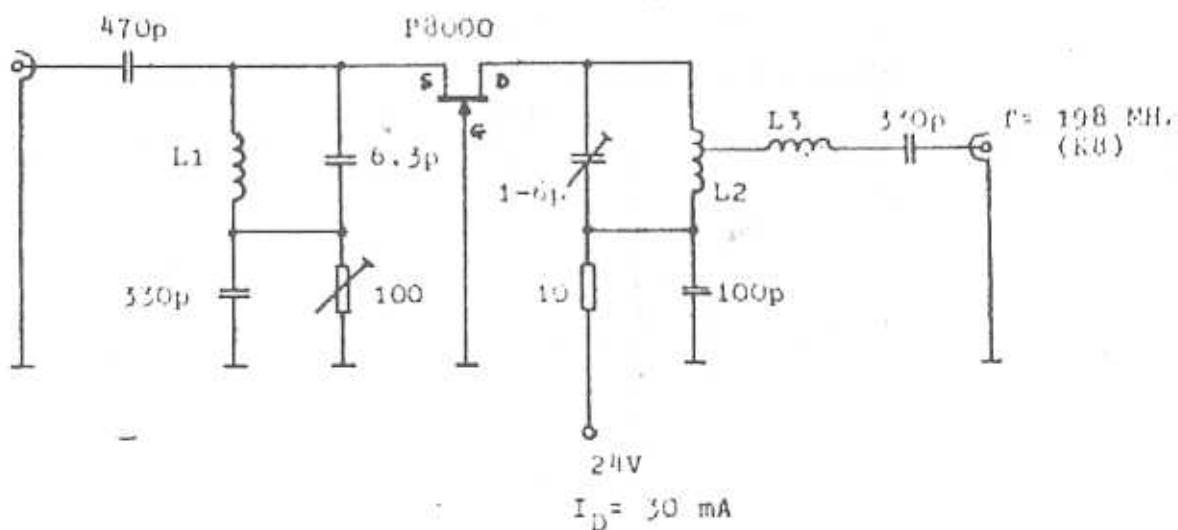
Deutschland GmbH

Mitterstr. 1, 805 Freising, Tel. 08161/80-1

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VHF FET - LEISTUNGSVERSTÄRKER (FIG.1)



L1 = 5 Wdg 4 mm Ø 0.3 Cu L
L2 = 4.5 Wdg 8 mm Ø 0.6 Cu Ag
Anzapf bei 4 Wdg
L3 = 4 Wdg 5 mm Ø 0.3 Cu L



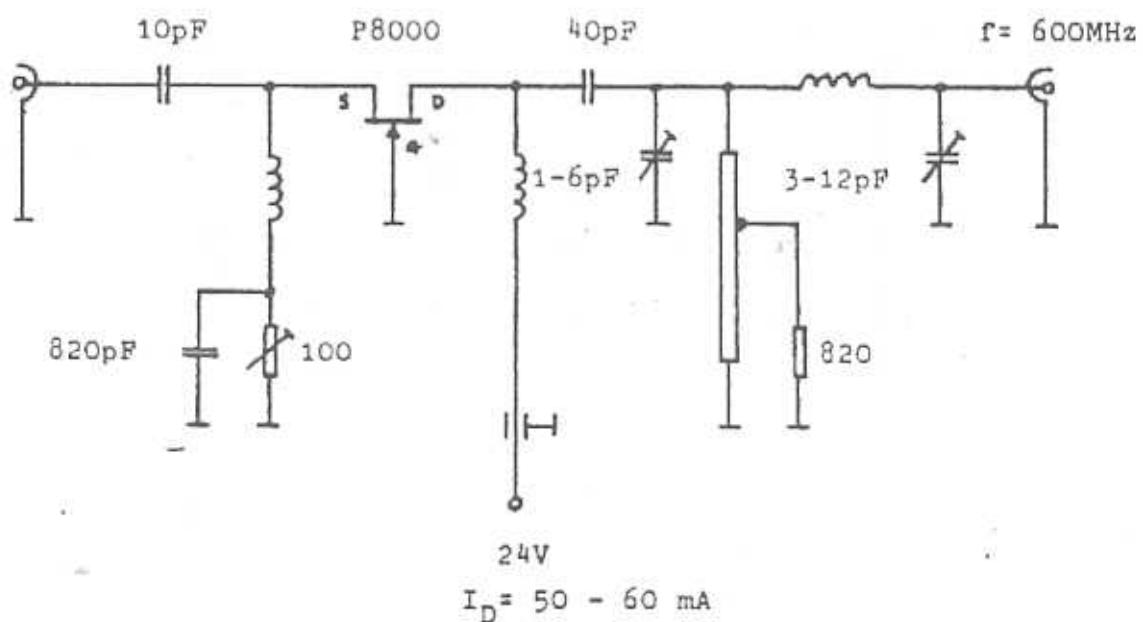
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UHF FET - LEISTUNGSVERSTAERKER (FIG.2)



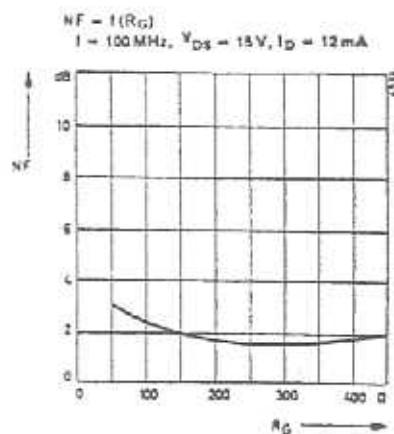
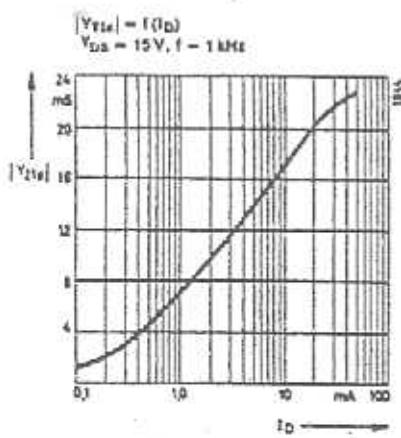
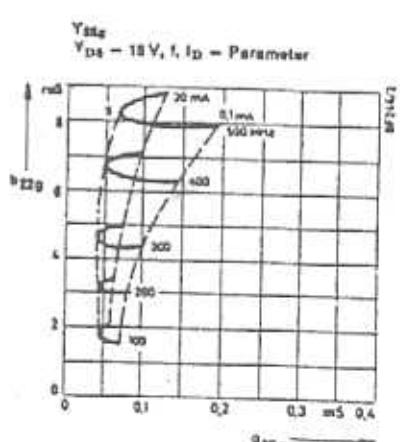
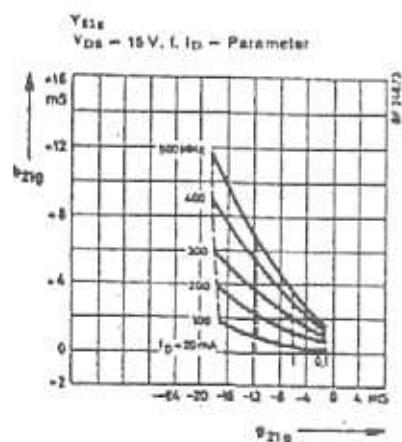
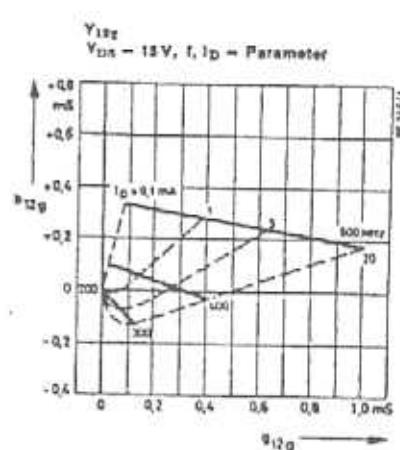
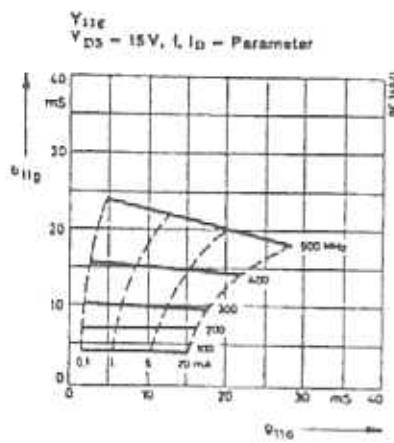
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nominal: 20 mS



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