

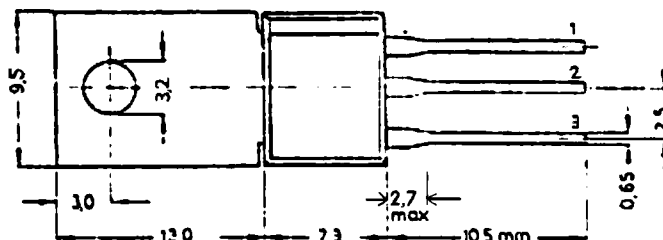
N-CHANNEL JUNCTION FIELD EFFECT TRANSISTOR

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

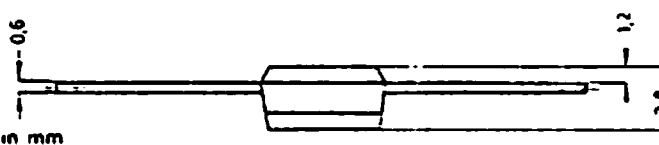
ADVANTAGES: o High output voltage
 o Low intermodulation
 o Simple circuit and device mounting

mechanical data

TO 202



D
G
S



All dimensions are in mm

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

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

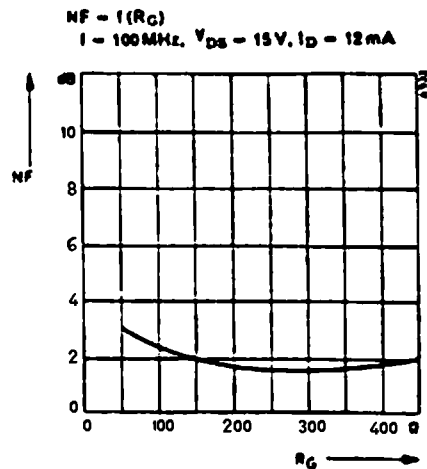
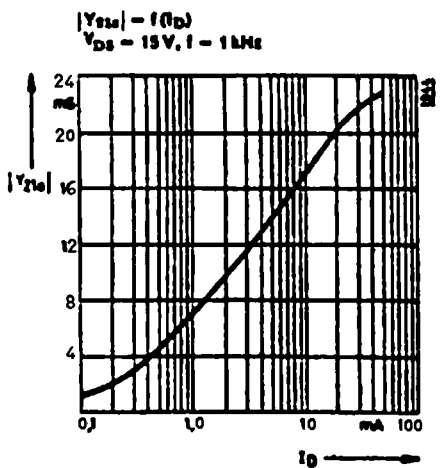
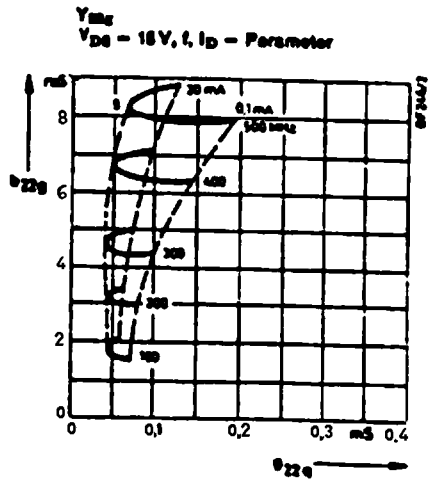
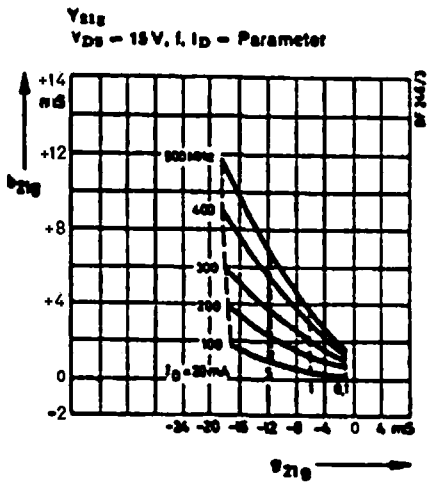
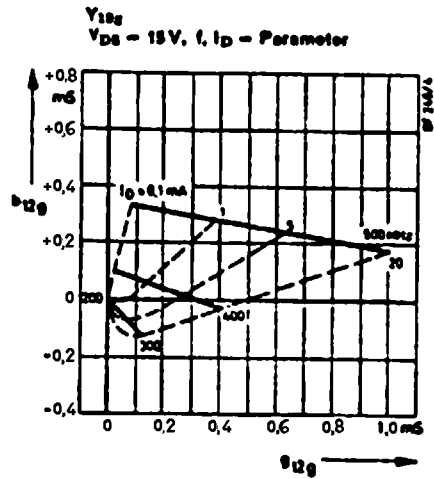
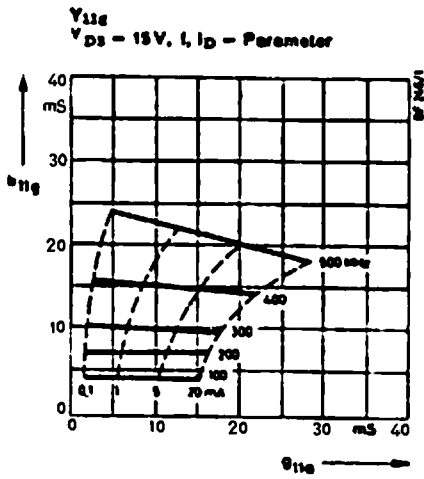
Drain-Gate Voltage.	30 V
Drain-Source Voltage.	± 30 V
Gate-Source Voltage	- 30 V
Forward Gate Current.	10 mA
Continuous Device Dissipation at (or below) 25°C. Free-Air Temperature (see note 2)	2 W
Continuous Device Dissipation at (or below) 25°C. Case Temperature (see note 3)	5 W
Storage Temperature 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.

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	$R_L = 75 \text{ Ohm}, f = 200MHz$		5.3		V
G_p	Power-Gain	$I_D = 30mA, f = 600MHz$ (fig. 2)		9		dB
U_a	Output-Voltage DIN 45004	$R_L = 75 \text{ Ohm}, f = 600MHz$ (fig. 2)		2.8		dB





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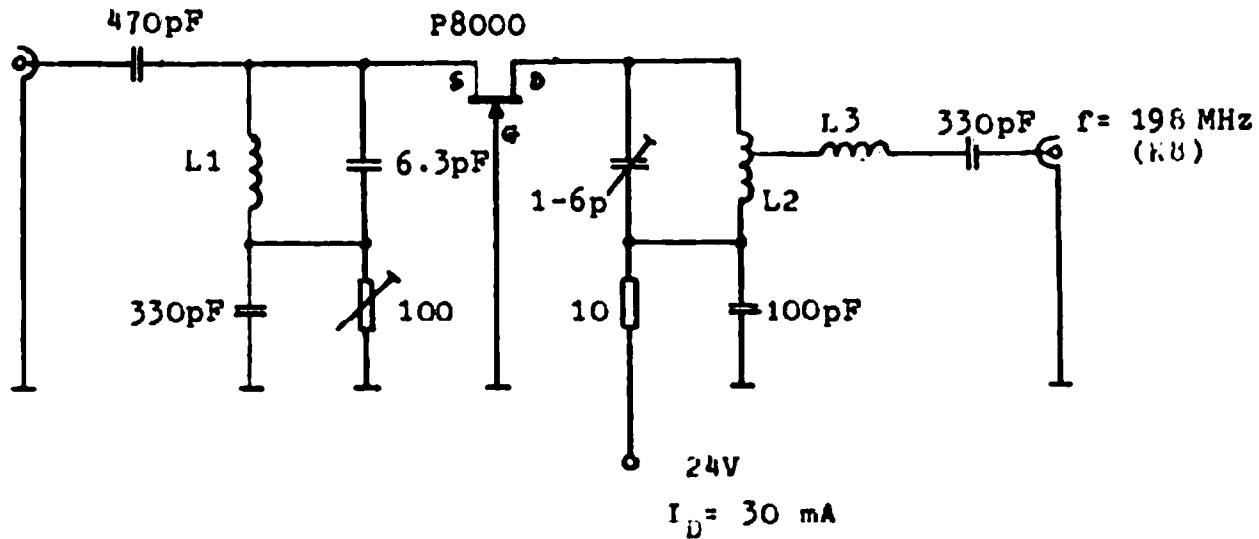


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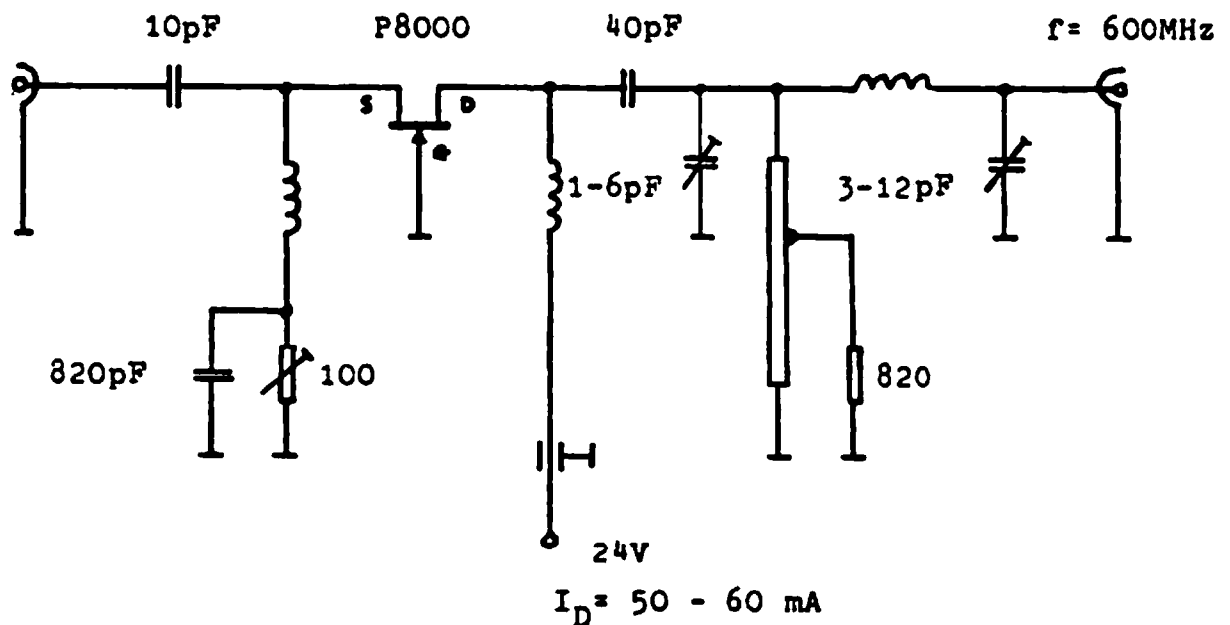


VHF FET - LEISTUNGSVERSTAERKER (FIG.1)



- 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

UHF FET - LEISTUNGSVERSTAERKER (FIG.2)



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