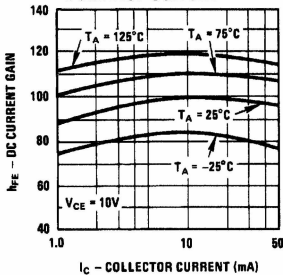


TL/G/10037-69

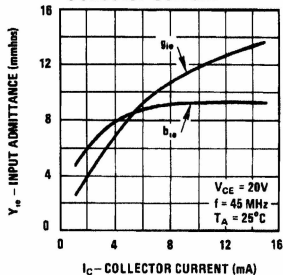
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

Symbol	Conditions	Min	Typ	Max	Units
P_G	$f = 45 \text{ MHz}, V_{CE} = 10\text{V}, I_C = 10 \text{ mA}$	25	30		dB
f_T	$V_{CE} = 10\text{V}, I_C = 10 \text{ mA}$	400	700		MHz
$rb'Cc$	$f = 79.8 \text{ MHz}, V_{CE} = 10\text{V}, I_C = 8 \text{ mA}$			20.0	ps
C_{CB}	$f = 1.0 \text{ MHz}, V_{CB} = 10\text{V}, I_E = 0$		0.55	0.65	pF
h_{FE}	$V_{CE} = 10\text{V}, I_C = 10 \text{ mA}$ $V_{CE} = 10\text{V}, I_C = 4 \text{ mA}$	40 30	100	250	
$V_{BE(ON)}$	$V_{CE} = 10\text{V}, I_C = 10 \text{ mA}$		0.80	0.90	V
$V_{CE(SAT)}$	$I_C = 30 \text{ mA}, I_B = 3 \text{ mA}$		0.15	0.50	V
r_{oep}	$f = 4.5 \text{ MHz}, V_{CE} = 10\text{V}, I_C = 2 \text{ mA}$	80k			Ω
BV_{CEO}	$I_C = 1 \text{ mA}$	35			V
BV_{CBO}	$I_C = 10 \mu\text{A}$	45			V
BV_{EBO}	$I_E = 10 \mu\text{A}$	4.0			V
I_{CBO}	$V_{CB} = 30\text{V}$			100	nA
I_{EBO}	$V_{EB} = 3.0\text{V}$			100	nA

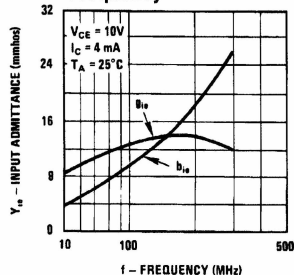
DC Current Gain vs Collector Current



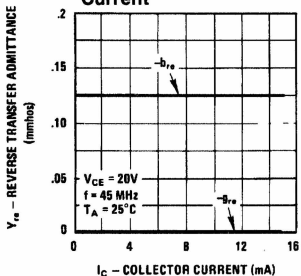
Input Admittance vs Collector Current



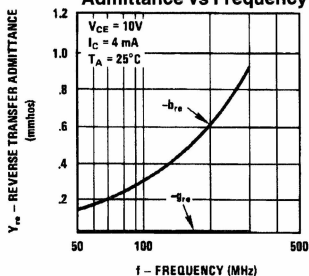
Input Admittance vs Frequency



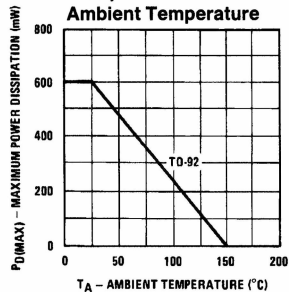
Reverse Transfer Admittance vs Collector Current



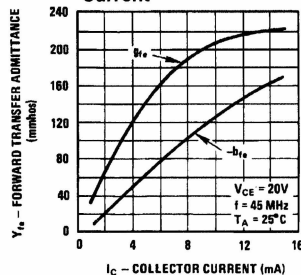
Reverse Transfer Admittance vs Frequency



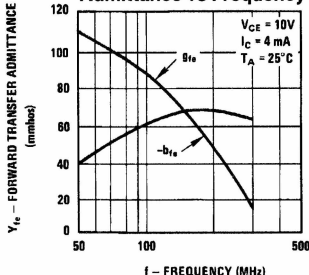
Maximum Power Dissipation vs Ambient Temperature



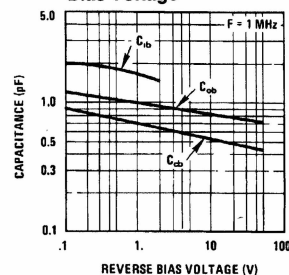
Forward Transfer Admittance vs Collector Current



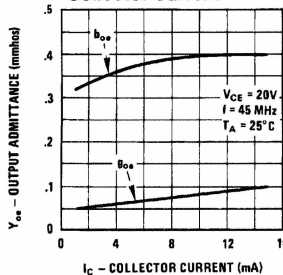
Forward Transfer Admittance vs Frequency



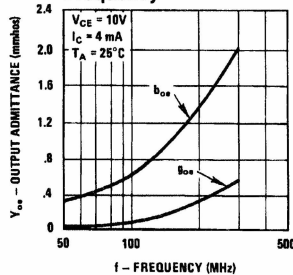
Capacitance vs Reverse Bias Voltage



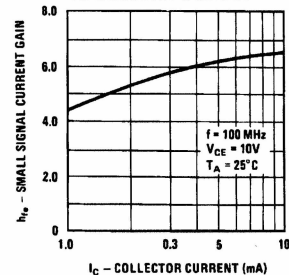
Output Admittance vs Collector Current



Output Admittance vs Frequency

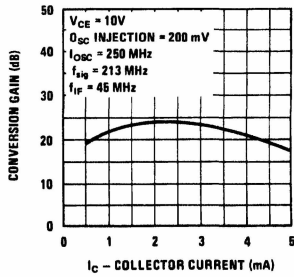


Small Signal Current Gain vs Collector Current

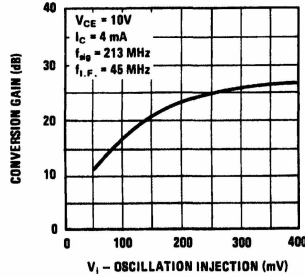


Process 49

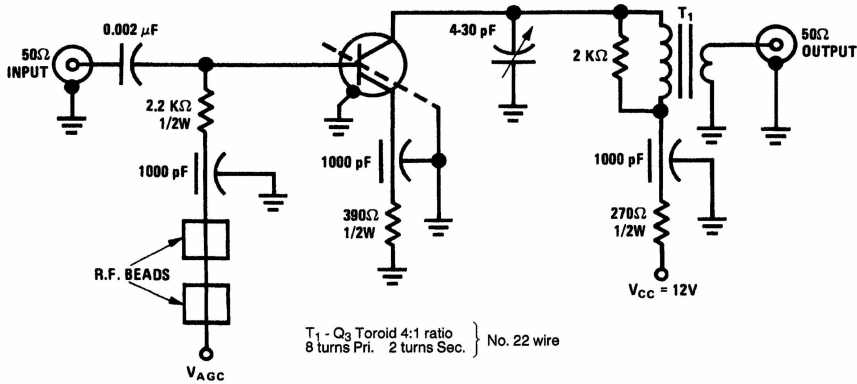
Conversion Gain vs Collector Current



Conversion Gain vs Oscillator Injection Level

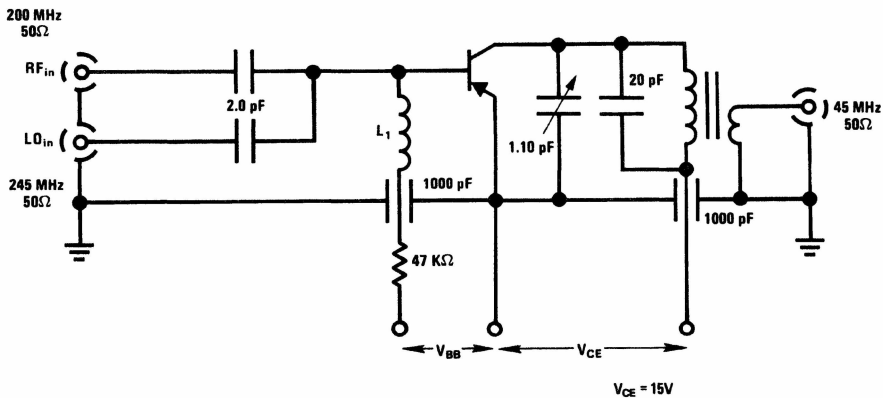


TL/G/10037-71



TL/G/10037-72

FIGURE 1. 45 MHz Power Gain Circuit



TL/G/10037-73

FIGURE 2. 200 MHz Conversion Gain Test Circuit