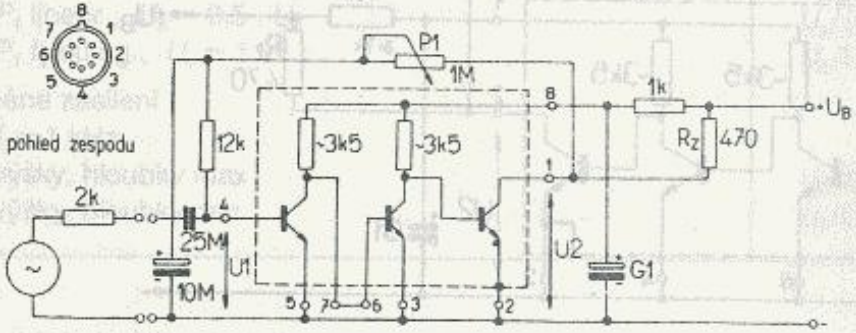
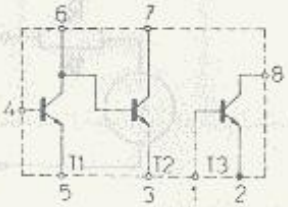
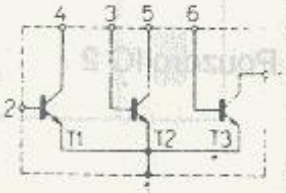
MAA 325, MAA 345, MAA 435, MAA 525 INTEGROVANÉ OBVODY PRO VŠEOBECNÉ POUŽITÍ

MAA 325, MAA 345, MAA 435, MAA 525 УНИВЕРСАЛЬНЫЕ ИНТЕГРАЛЬНЫЕ СХЕМЫ • MAA 325, MAA 345, MAA 435, MAA 525 UNIVERSAL INTEGRATED CIRCUITS • MAA 325, MAA 345, MAA 435, MAA 525 UNIVERSALE INTEGRIERTE SCHALTUNGEN







MAA 325, MAA 345 Pouzdro IO 3 MAA 435 MAA 525

Charakteristické údaje:

				Měřeno při
MAA 325 MAA 345	A_u	>70	dB	$U_B = 7$ V, $U_{2\,eff} = 2{,}1$ V, $f = 1$ kHz, $R_G = 2$ kΩ, $R_L = 470$ Ω
	A_u	>60	dB	$U_B = 7$ V, $U_{2\,eff} = 1{,}7$ V, $f = 1$ MHz, $R_G = 2$ kΩ
	K	<10	%	$U_B = 7$ V, $U_{2\,eff} = 2{,}1$ V, $f = 1$ kHz, $R_G = 2$ kΩ, $R_L = 470$ Ω
	F[1])	<8	dB	$U_{7/5} = 6$ V, $I_5 = 100$ µA, $f = 1$ kHz, $R_G = 2$ kΩ, $\Delta f = 30$ Hz . . . 15 kHz
	h_{21E}[1])	>30		$U_{7/5} = 1$ V, $I_5 = 1$ mA
	$U_{7/5\,sat}$[1])	<0,2	V	$U_{8/5} = 6$ V, $I_C = 10 . I_B$
	$U_{1/2\,sat}$[1])	<0,6	V	$U_{8/2} = 6$ V, $U_{6/3} = 0$ V, $R_L = 470$ Ω
MAA 435	h_{21E1}	>40		$U_{6/4} = 6$ V, $I_5 = 0{,}2$ mA
	h_{21E2}	>40		$U_{7/6} = 6$ V, $I_3 = 0{,}2$ mA
	h_{21E3}	>40		$U_{8/1} = 3{,}5$ V, $I_2 = 15$ mA
	U_{BE}	0,55 . . . 0,8	V	$I_5 = 0{,}2$ mA, $U_{4/5} = 6$ V
	$U_{8/2S}$	<0,7	V	$I_1 = 0{,}5$ mA, $I_8 = 20$ mA
	$U_{7/3S}$	<0,9	V	$I_6 = 0{,}2$ mA, $I_7 = 8$ mA
	F	<8	dB	$U_{6/5} = 6$ V, $I_6 = 100$ µA, $R_G = 2$ kΩ, $f = 1$ kHz, $\Delta f = 30$ Hz . . . 15 kHz
	$\lvert h_{21E} \rvert$ (T1, T2, T3)	≧1		$U_{CE} = 6$ V, $I_E = 2$ mA, $f = 100$ MHz

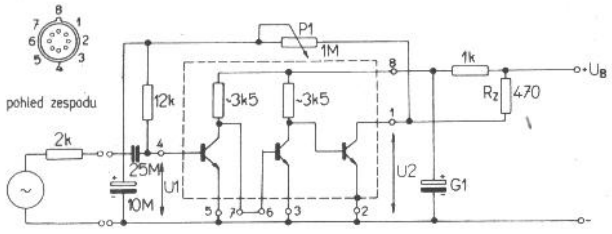
[1]) Prvního tranzistoru. [2]) Třetího tranzistoru.

MAA 525	h_{21E}	>20		$U_{CB} = 6$ V, $I_E = 2$ mA (T_1, T_2, T_3)
	U_{BE}	0,5 < 0,75 < 0,8	V	$U_{CB} = 6$ V, $I_E = 200$ µA (T_1, T_2, T_3)
	U_{CES}	<0,4	V	$I_C = 8$ mA, $I_B = 0,4$ mA (T_1, T_2, T_3)
	$\lvert h_{21e} \rvert$	≧1		$U_{CE} = 6$ V, $I_E = 2$ mA, $f = 100$ MHz, (T_1, T_2, T_3)
	$F(T_1)$	≦10	dB	$U_{4/1} = 6$ V, $I_4 = 100$ µA, $R_G = 2$ kΩ, $f = 1$ kHz, $\Delta f = 30$ Hz . . . 15 kHz

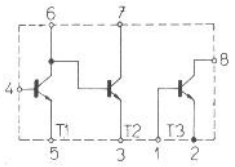
Mezní hodnoty:

MAA 325			MAA 345		MAA 435				MAA 525 (T1, T2, T3)			
U_B	max.	7	12	V	$U_{6/5}$	max.	7	V	U_{CEO}	max.	7	V
$U_{S/3}$	max.	7	7	V	$U_{7/3}$	max.	7	V	U_{EBO}	max.	5	V
$U_{1/2}$	max.	7	12	V	$U_{8/2}$	max.	9	V	I_C (T3)	max.	40	mA
$U_{7/40}$	max.	20		V	$U_{6/4}$	max.	15	V	I_C (T2)	max.	20	mA
$I_{7/5}$	max.	7		V	$U_{8/1}$	max.	15	V	I_C (T1)	max.	10	mA
$U_{5/4\,M}$	max.	6		V	$U_{5/4}$	max.	6	V	P_{tot} [1])	max.	300	mW
$U_{3/6M}$	max.	6		V	$U_{3/6}$	max.	6	V	α_j	max.	150	°C
I_1	max.	40		mA	$U_{2/1}$	max.	6	V	ϑ_a	max.	−55 . . . +125	°C
I_2	max.	40		mA	I_2	max.	40	mA				
I_5	max.	20		mA	I_5	max.	20	mA				
I_7	max.	20		mA	I_3	max.	20	mA				
I_4	max.	10		mA	I_1	max.	10	mA				
I_3	max.	5		mA	I_4	max.	10	mA				
I_6	max.	10		mA	P_{tot} [1])	max.	300	mW				
P_{tot} [1])	max.	300		mW	ϑ_j	max.	150	°C				
ϑ_j	max.	150		°C	ϑ_a	max.	−55 . . . +125	°C				
ϑ_a	max.	−55 . . . +125		°C								

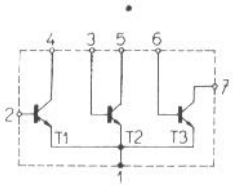
[1]) $\vartheta_a \leqq 45$ °C



MAA325
MAA345



MAA435



MAA525

Pouzdro IO 3

Charakteristické údaje:				Měřeno při
MAA325 MAA345	A_U	> 70	dB	U_B = 7 V, $U_{2\,eff}$ = 2,1 V, f = 1 kHz, R_G = 2 kΩ, R_L = 470 Ω
	A_U	> 60	dB	U_B = 7 V, $U_{2\,eff}$ = 1,7 V, f = 1 MHz, R_G = 2 kΩ
	K	< 10	%	U_B = 7 V, $U_{2\,eff}$ = 2,1 V, f = 1 kHz, R_G = 2 kΩ, R_L = 470 Ω
	F [1]	< 8	dB	$U_{7/5}$ = 6 V, I_5 = 100 μA, f = 1 kHz, R_G = 2 kΩ, Δf = 30 Hz . . . 15 kHz
	h_{21E} [1]	> 30		$U_{7/5}$ = 1 V, I_5 = 1 mA
	$U_{7/5\,sat}$ [1]	< 0,2	V	$U_{8/5}$ = 6 V, I_C = 10 . I_B
	$U_{1/2\,sat}$ [2]	< 0,6	V	$U_{8/2}$ = 6 V, $U_{6/3}$ = 0 V, R_L = 470 Ω
MAA435	h_{21E1}	> 40		$U_{1/4}$ = 6 V, I_5 = 0,2 mA
	h_{21E2}	> 40		$U_{7/6}$ = 6 V, I_3 = 0,2 mA
	h_{21E3}	> 40		$U_{8/1}$ = 3,5 V, I_2 = 15 mA
	U_{BE}	0,55 . . . 0,8	V	I_5 = 0,2 mA, $U_{4/5}$ = 6 V
	$U_{8/2S}$	< 0,7	V	I_1 = 0,5 mA, I_8 = 20 mA
	$U_{7/3S}$	< 0,9	V	I_6 = 0,2 mA, I_7 = 8 mA
	F	< 8	dB	$U_{6/5}$ = 6 V, I_6 = 100 μA, R_G = 2 kΩ, f = 1 kHz, Δf = 30 Hz . . . 15 kHz
	$\|h_{21e}\|$ (T1, T2, T3)	≧ 1		U_{CE} = 6 V, I_E = 2 mA, f = 100 MHz
MAA525	h_{21E}	> 20		U_{CB} = 6 V, I_E = 2 mA (T_1, T_2, T_3)
	U_{BE}	0,5 < 0,75 < 0,8	V	U_{CB} = 6 V, I_E = 200 μA (T_1, T_2, T_3)
	U_{CES}	< 0,4	V	I_C = 8 mA, I_B = 0,4 mA (T_1, T_2, T_3)
	$\|h_{21e}\|$	≧ 1		U_{CE} = 6 V, I_E = 2 mA, f = 100 MHz, (T_1, T_2, T_3)
	F (T_1)	≦ 10	dB	$U_{4/1}$ = 6 V, I_4 = 100 μA, R_G = 2 kΩ, f = 1 kHz, Δf = 30 Hz . . . 15 kHz

[1]) Prvního tranzistoru

[2]) Třetího tranzistoru

Mezní hodnoty:

MAA325 MAA345					MAA435				MAA525 (T1, T2, T3)			
U_B	max.	7	12	V	$U_{6/5}$	max.	7	V	U_{CEO}	max.	7	V
$U_{8/3}$	max.	7	7	V	$U_{7/3}$	max.	7	V	U_{EBO}	max.	5	V
$U_{1/2}$	max.	7	12	V	$U_{8/2}$	max.	9	V	I_C (T3)	max.	40	mA
$U_{7/10}$	max.	20		V	$U_{6/1}$	max.	15	V	I_C (T2)	max.	20	mA
$U_{7/5}$	max.	7		V	$U_{8/1}$	max.	15	V	I_C (T1)	max.	10	mA
$U_{5/4M}$	max.	6		V	$U_{5/4}$	max.	6	V	P_{tot} [3])	max.	300	mW
$U_{3/6M}$	max.	6		V	$U_{3/6}$	max.	6	V	ϑ_j	max.	150	°C
I_1	max.	40		mA	$U_{2/1}$	max.	6	V	ϑ_a	max.	−55 . . . +125	°C
I_2	max.	40		mA	I_2	max.	40	mA				
I_5	max.	20		mA	I_5	max.	20	mA				
I_7	max.	20		mA	I_3	max.	20	mA				
I_4	max.	10		mA	I_1	max.	10	mA				
I_3	max.	5		mA	I_4	max.	10	mA				
I_6	max.	10		mA	P_{tot} [3])	max.	300	mW				
P_{tot} [3])	max.	300		mW	ϑ_j	max.	150	°C				
ϑ_j	max.	150		°C	ϑ_a	max.	−55 . . . +125	°C				
ϑ_a	max.	−55 . . . +125		°C								

[3]) $\vartheta_a \leq 45$ °C