

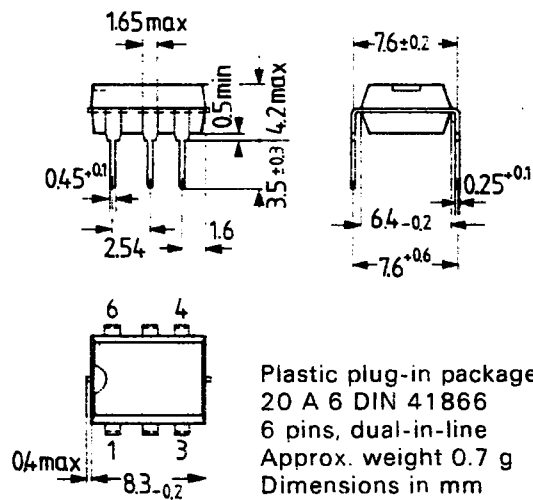
Preliminary data

Bipolar circuit

Fast ECL divider with constant dividing ratio 1 : 64 covering the frequency range between 80 MHz and 1 GHz. Together with the types S 0437, TBB 1331 A and a voltage controlled oscillator, a frequency and phase comparison circuit can be realized for channel selection in TV sets.

- Input frequency up to 1 GHz
- Few external components
- Sinusoidal input signal possible
- 2 balanced ECL outputs in phase opposition

Type	Ordering code
S 0436	Q67000-A1339



Maximum ratings

Supply voltage	V_2	8	V
Input voltage	V_{6ss}	2.5	V
Output current	$-I_3; -I_4$	3	mA
Thermal resistance (system-air)	$R_{th\text{samb}}$	140	K/W
Junction temperature	T_j	150	°C
Storage temperature	T_s	-40 to +125	°C

Range of operation

Supply voltage	V_2	6.45 to 7.15	V
Ambient temperature in operation	T_{amb}	0 to +70	°C
Input frequency	f_i	80 to 1000	MHz

Preliminary data

Characteristics ($V_2 = 6.8 \text{ V}$; $T_{\text{amb}} = 25^\circ\text{C}$; input signal)
according to test circuit

		min	typ	max	
Current consumption	I_2		55	75	mA
Input voltage range					
$f_i = 80 \text{ MHz}$	V_6	200		1000	mV
$f_i = 300 \text{ MHz}$	V_6	150		1000	mV
$f_i = 470 \text{ MHz}$	V_6	100		1000	mV
$f_i = 800 \text{ MHz}$	V_6	150		1000	mV
$f_i = 950 \text{ MHz}$	V_6	200		1000	mV
Output low level	$V_3; V_4$		5.3	5.45	V
Output high level	$V_3; V_4$	6.05	6.2		V

Input voltage ratings are measured according to the test circuit with HP 3406 A at the divider input.

Test circuit

