

Fig. 21 SO 24

Fig. 22 8-Leads

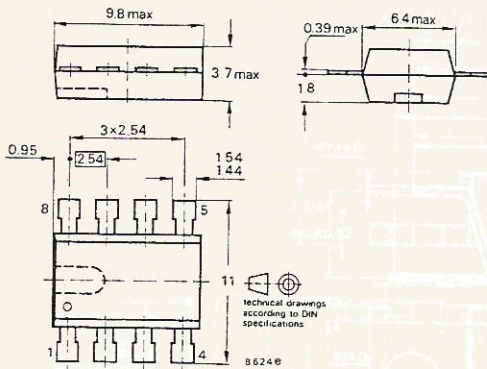


Fig. 22 Special case 8-leads

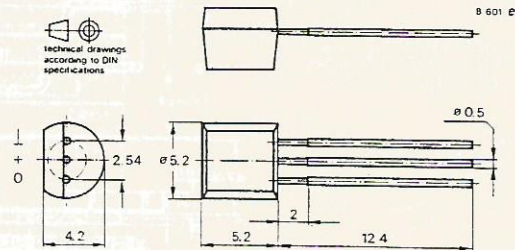


Fig. 23 TO 92

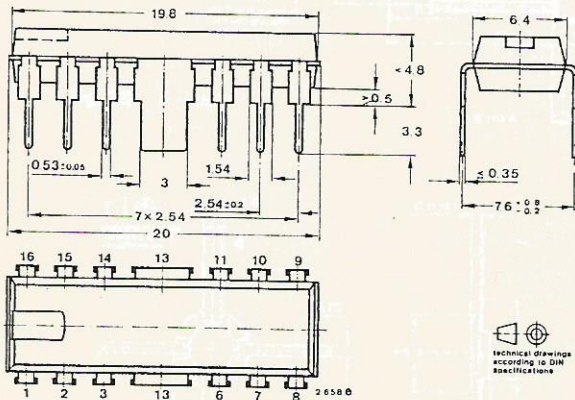


Fig. 24 Special case DIP 16

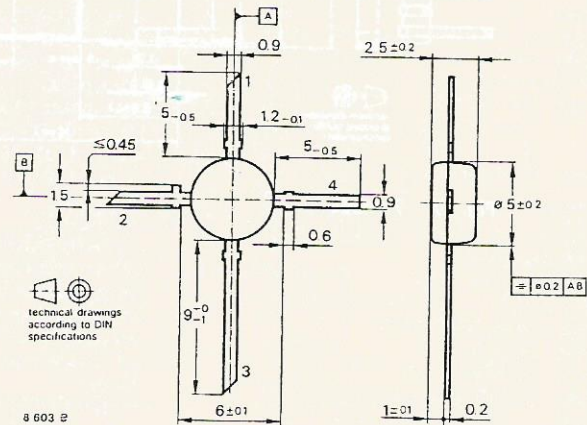


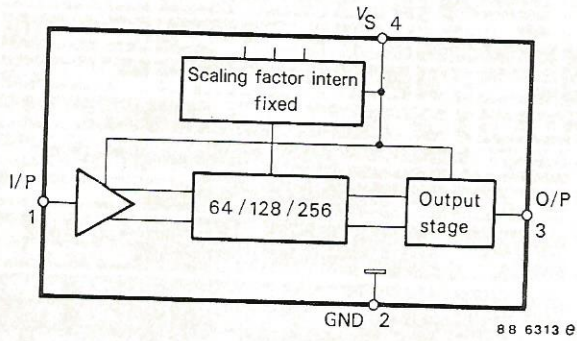
Fig. 25 TO 50



TV and VTR Applications – Prescalers for TV and CATV

U 810 BS · U 811 BS · U 812 BS · 1.2 GHz

Supply voltage range	Pin 4	V_S	4.5...5.5	V
Supply current $V_S = 5$ V	Pin 4	I_S	40	mA
Input sensitivity $f_i = 70 \dots 1200$ MHz, $R_G = 50 \Omega$	Pin 1	V_i	≤ 20	mV
Large signal compatibility, $R_G = 50 \Omega$	Pin 1	V_i	≥ 250	mV
Frequency range		f_i	70...1200	MHz
ECL output voltage		V_o	0.8	V_{pp}



Features:

- ECL output stage
- U 810 BS divides by 64
- U 811 BS divides by 128
- U 812 BS divides by 256
- High input sensitivity
- Low output impedance
- Low power consumption
- Electrostatic protection according to Mil-Std. 883

Case:

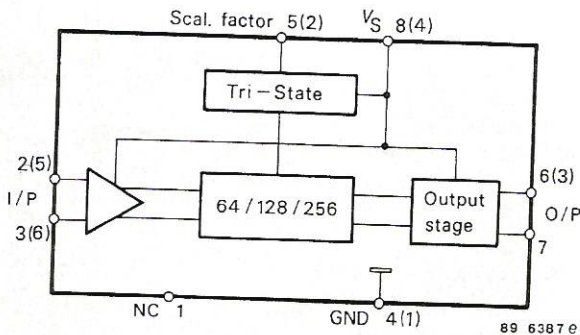
TO 50 plastic
Dimensions see page 103
Number 25

U 813 BS · U 813 BSE : 1.1 GHz U 833 BS · U 833 BSE : 1.3 GHz

Supply voltage	V_S	4.5...5.5	V
Supply current	U 813 BS	I_S	38...45 mA
	U 813 BSE	I_S	38...50 mA
	U 833 BS	I_S	40...50 mA
	U 833 BSE	I_S	40...50 mA
Input sensitivity	U 813 BS/BSE	V_i	10 mV
		V_i	15 mV
	U 833 BS/BSE	V_i	10 mV
		V_i	20 mV
Large signal compatibility	V_i	300	mV
Output voltage swing: (each output)	Balanced ECL	V_o	0.8 V_{pp}
	Emitter follower	V_o	1 V_{pp}
Switching voltage for scaling factor:	÷ 64	V_{SF}	open
	÷ 128	V_{SF}	$V_S - 0.5$ V
	÷ 256	V_{SF}	0...0.5 V

Features:

- U 813 BS/U 833 BS ECL output stage
- U 813 BSE/U 833 BSE emitter follower output stage
- 3 scaling factors 64/128/256 programmable at Pin 5 (2)
- Electrostatic protection
- High input sensitivity
- Low output impedance
- Low power consumption



Case	Type	Dimensions see page	Number
DIP 8	U 813 BS	98	4
	U 813 BSE		
	U 833 BS		
	U 833 BSE		
SO 8	U 813 BS -FP	101	17
	U 813 BSE-FP		
	U 833 BS -FP		
	U 833 BSE-FP		
SIP 6	U 813 BS -SP	101	16
	U 813 BSE-SP		
	U 833 BS -SP		
	U 833 BSE-SP		

