

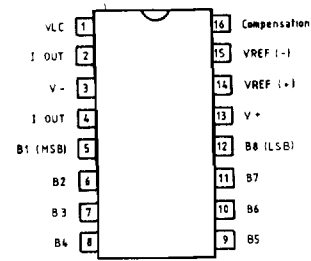
**ANALOGUE INTEGRATED CIRCUITS**

**CONTROL, INDUSTRIAL**



**8-BIT DIGITAL-TO-ANALOG CONVERTORS**

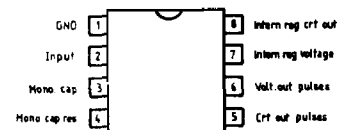
**DAC 08H** Features :  
 Operating temperature : ..... 0 ... +70°C  
 Supply voltage : ..... ±4.5 / ±18 V  
 Differential input voltage : ..... V- ... V+ V  
**DAC 08E** Common mode input voltage : ..... V- ... V+ V  
 Settling time : ..... typ. 100 ns  
 Nonlinearity over FULL SCALE : DAC 08H max ±0.10 %  
 DAC 08E max ±0.19 %  
 DAC 08C max ±0.39 %



PACKAGE MP-117 / TOP VIEW

**PULSE SHAPER CIRCUITS FOR REVOLUTION COUNTERS**

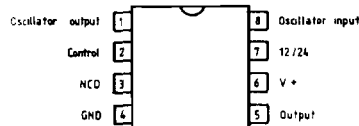
**SAK 215MN** Features :  
 Operating temperature : SAK 215MN ..... -55 / +125°C  
 SAK 215VN ..... -25 ... +85°C  
 SAK 215 N ..... 0 ... +70°C  
 Supply voltage : ..... nom. 12 V  
 Supply current : ..... max. 12 mA  
 Internal regulator voltage : ..... 7.4 / 8.2 V  
 Output voltage pulse amplitude : ..... 2 ... 2.5 V  
 Designed for frequency-to-current converters.



PACKAGE MP-48 / TOP VIEW

**POWER TIMER**

**TBA 315N** Features :  
 Operating temperature : ..... 0 ... +70°C  
 Supply voltage : ..... 10 ... 32 V  
 Supply current (V=15V) : ..... 3.5 / 18 mA  
 Control voltage : ..... 0 ... V<sub>CC</sub> V  
 Output voltage (I=175mA) : ..... max. 1.5 V  
 Output current : ..... max. 200 mA  
 Duty cycle (V<sub>CC</sub>=12V) : ..... 40 ... 65 %  
 Power dissipation : ..... max. 300 mW

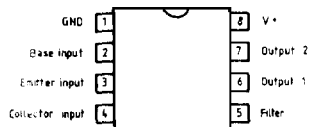


PACKAGE MP-48 / TOP VIEW

T0-116 case available for max. 0.5W power dissipation (TBA 315E)

**INDUCTIVE PROXIMITY SENSOR**

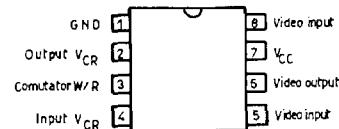
**TCA 105N** Features :  
 Operating temperature : ..... 0 ... +70°C  
 Supply voltage : ..... 4.5 ... 20 V  
 Threshold input voltage : ..... 300 ... 500mV  
 Hysteresis : ..... 25 ... 50mV  
 Supply current : ..... max. 5 mA  
 Low-level output voltage @ 50 mA : ..... max. 1.15 V  
 Residual output current @ 20 V : ..... max. 60 uA  
 Switching time : ..... typ. 3 us



PACKAGE MP-48 / TOP VIEW

**VIDEO SWITCH**

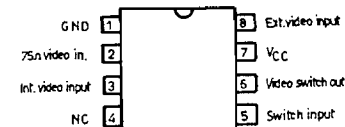
**TDA 5850** Features :  
 Operating temperature : ..... -25 / +70°C  
 Supply voltage : ..... 10 ... 16 V  
 Supply current : ..... 15 ... 30 mA  
 Gain G<sub>2/8</sub> : ..... typ 1/3  
 Gain G<sub>5/8</sub> : ..... typ 1  
 Gain G<sub>6/8</sub> : ..... typ 1  
 Gain G<sub>6/4</sub> : ..... typ 3  
 Gain G<sub>5/4</sub> : ..... typ 3



PACKAGE MP-48 / TOP VIEW

**VIDEO SWITCH**

**TEA 2014A** Features :  
 Operating temperature : ..... -25 ... +70°C  
 Supply voltage : ..... 8 ... 14 V  
 Supply current : ..... typ. 75 mA  
 Gain G<sub>6/8</sub> : ..... +5 ... +7 dB  
 Gain G<sub>6/3</sub> : ..... -1 ... 0 dB  
 Gain G<sub>2/3</sub> : ..... -1.8 ... -0.4 dB

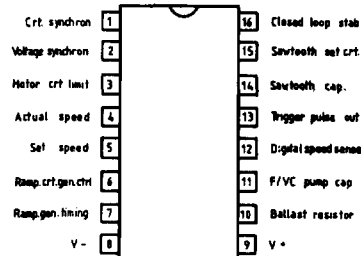


PACKAGE MP-48 / TOP VIEW

UNIVERSAL AC MOTORS SPEED CONTROLLER

TDA 1085A

Features :  
 Operating temperature : ..... 0 ... +70°C  
 Regulated voltage : ..... typ. 15.5 V  
 Control-amplifier transconductance : ..... max. 300µA/V  
 Trigger-pulse repetition period : ..... max. 215 µs  
 Trigger-pulse width : ..... max. 100 µs  
 Output leakage current : ..... max. 30 µA  
 Guaranteed full-wave triac-drive.



PACKAGE MP-117 / TOP VIEW

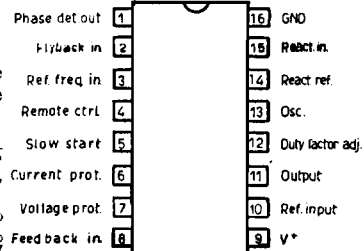
CONTROL CIRCUITS FOR SWITCHED-MODE POWER SUPPLIES

TDA 2581

Features : TDA 2581 controls the duty factor of the positive-going transient of the output signal while TDA 2582 controls the negative-going transient.

TDA 2582

	TDA 2581	TDA 2582
Operating temperature : ...	-25...+70°C	-25...+70°C
Supply voltage : .....	typ. 12 V	typ. 12 V
Horizontal drive pulse : ..	typ. 11 V <sub>pp</sub>	5 ... 11 V <sub>pp</sub>
Flyback pulse (diff. defl.)	typ. 5 V <sub>pp</sub>	1 ... 5 V <sub>pp</sub>
External reference voltage:	typ. 6.7 V	typ. 6.1 V



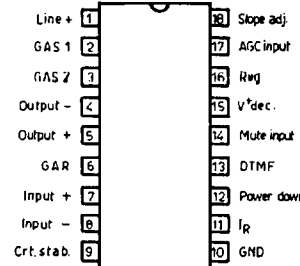
PACKAGE MP-117 / TOP VIEW

TELEPHONE TRANSMISSION CIRCUITS WITH DIALLER INTERFACE

TEA 1060

Features :  
 Operating temperature : ..... -25...+75°C  
 Line voltage at I<sub>line</sub>=15mA : ..... typ. 4.45 V  
 Line current operating range : ..... 10...140 mA  
 Supply current (power input HIGH/LOW) : ..... typ. 55µ/1mA  
 Amplification control range : ..... typ. 5.9 dB  
 Voltage Amplif. Range (receiving ampl.) : 17 ... 39 dB  
 V.A.R. (microphone amplifier) TEA 1060 : 44 ... 60 dB  
 TEA 1061 : 30 ... 46 dB

TEA 1061

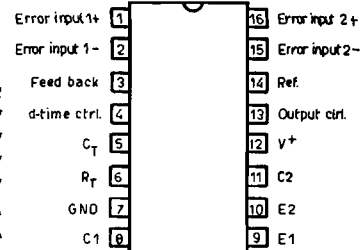


PACKAGE DIL-18 / TOP VIEW

PULSE-WIDTH-MODULATION CONTROL CIRCUIT

\$ TL 494

Features ( Preliminary Data ) :  
 Operating temperature : ..... 0 ... +70°C  
 Supply voltage : ..... 7 ... 40 V  
 Amplifier input voltage : ..... 0.3 /V<sup>+</sup>-2 V  
 Reference output voltage : ..... max. 5 V  
 Collector output voltage : ..... max. 40 V  
 Collector output current : ..... max. 200 mA  
 Current into feedback terminal : ..... max. 0.3 mA  
 Oscillator frequency : ..... 1...300 kHz



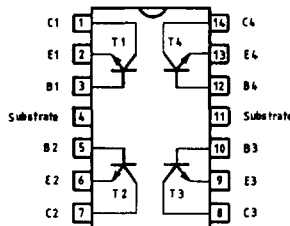
PACKAGE MP-117 / TOP VIEW

TRANSISTOR ARRAYS

β 340D

Features :  
 Operating temperature : ..... -25...+70°C  
 Collector-emitter voltage, V<sub>CEO</sub> : ..... max. 15 V  
 Collector-base voltage, V<sub>CB0</sub> : ..... max. 20 V  
 Collector-substrate voltage, V<sub>CSS</sub> : ..... max. 30 V  
 Current gain ( transistor T1 ), h<sub>FE</sub> : 56 ... 560  
 Current gain matching : ..... 0.8 ... 1.25  
 Base-emitter volt. matching (β 340D) : ..... max. 5 mV  
 Collector current : ..... max. 10 mA

β 342D



PACKAGE TO-116 / TOP VIEW

**ANALOGUE INTEGRATED CIRCUITS**

CONTROL, INDUSTRIAL

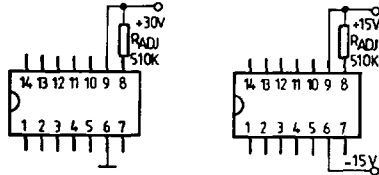


**TEMPERATURE CONTROLLED TRANSISTOR ARRAYS**

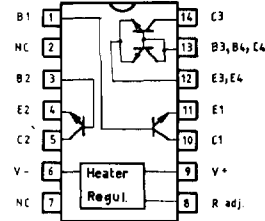
**BA 726**  
**BA 726X**

Features :

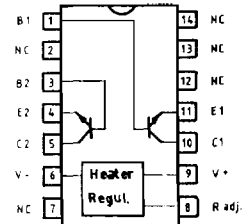
	<b>BA 726</b>	<b>BA 726X</b>
Transistor pair offset voltage :	max. ±3	max. ±1 mV
Max. bias current @ $I_C=100\mu A$ :	6	1 $\mu A$
Max. bias current @ $I_C=10\mu A$ :	300	200 nA
Current mirror precision :	± 20 %	inexistent
Collector-base voltage, $V_{CB0}$ :	max.	40 V
Collector-substrate voltage, $V_{CS}$ :	max.	40 V
Emitter-base reverse voltage, $V_{EB0}$ :	max.	5 V
Current through any transistor :	max.	5 mA
Thermostat supply current :	max.	50 mA
Operating temperature :	0 ... +70 °C	
On-chip temperature :	max. +125 °C	
Power dissipation :	max.	500 mW
Case-ambient thermal resistance :		200 °C/W



APPLICATIONS ( HEATER SUPPLYING )



BA 726 / PACKAGE TO-116



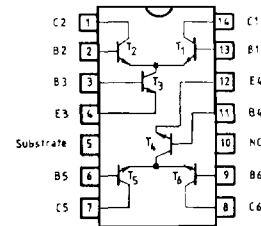
BA 726X / PACKAGE TO-116

**DUAL DIFFERENTIAL STAGE**

**BA 3054**

Features :

Operating temperature :	0 ... +70 °C
Collector-base voltage, $V_{CB0}$ :	max. 20 V
Collector-emitter voltage, $V_{CE0}$ :	max. 15 V
Emitter-base reverse voltage, $V_{EB0}$ :	max. 5 V
Collector current :	max. 50 mA
DC current gain per transistor :	typ. 150
Input offset voltage :	max. 5 mV
Input offset current :	max. 2 $\mu A$



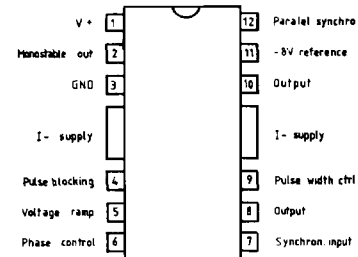
PACKAGE TO-116 / TOP VIEW

**PHASE-CONTROL REGULATOR FOR THYRISTORS & TRIACS**

**BAA 145**

Features :

Operating temperature :	0 ... +70 °C
Supply voltage :	max. +18 V
Positive supply current (pin 1) :	12 ... 30 mA
Negative supply current (pin 13) :	max. 25 mA
Negative supply current (pin 15) :	max. 5 mA
Synchronisation current :	max. 10 mA
Phase-control input current :	max. 10 $\mu A$
Output current :	max. 20 mA



PACKAGE CB-109B / TOP VIEW

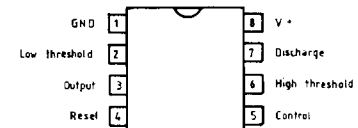
**TIMERS**

**BE 555MN**  
**BE 555N**

Features :

Operating temperature :	BE 555MN ..... -55 / +125 °C
	BE 555N ..... 0 ... +70 °C
Supply voltage :	4.5 ... 18 V
Reset voltage :	0.4 ... 1 V
Supply current :	max. 15 mA
Sink/Source output current :	max. 200 mA
Threshold voltage :	typ. 2V+ / 3 V
Power dissipation :	max. 300 mW

TO-116 case available for max. 0.5W power dissipation (BE 555M, E)



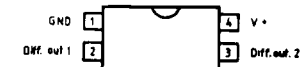
PACKAGE MP-48 / TOP VIEW

**LINEAR MAGNETIC HALL TRANSDUCERS, DIFFERENTIAL OUTPUT**

**BH 1**  
**BH 2**

Features : BH 1 and BH 2 are ICs equivalent with a resistor bridge, sensitive to the magnetic field variations.

Operating temperature :	0 ... +70 °C
Supply voltage :	0 ... 18 V
Output offset voltage ( $V+=5V$ ) :	BH 1 -2 ... +12mV
	BH 2 -12 ... +2mV
Supply current ( $V=5V$ ) :	max. 3 mA
Differential output voltage ( $B=40mT$ ) :	min. ± 8 mV



PACKAGE MP-24 / TOP VIEW



**BAR-GRAPH DISPLAY DRIVERS**

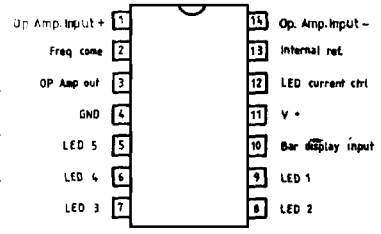
**BL 105** Features: For driving 5 or (if used in pair) 10 LED serial bar display at 0 to 20 mA current.

**BL 106** Operating temperature : ..... -25...+70°C

**BL 107** Supply voltage : ..... 12 ... 18 V

**BL 108** Incorporated Op. Amp. open-loop gain : min. 10,000

Input thresholds: BL 105 0.1 / 0.3 / 0.5 / 0.7 / 0.9 V  
 BL 106 0.2 / 0.4 / 0.6 / 0.8 / 1 V  
 BL 107 0.1 / 0.31 / 0.71 / 1 / 1.41 V  
 BL 108 0.18 / 0.5 / 0.84 / 1.19 / 2 V



PACKAGE TO-116 / TOP VIEW

**TRIAC/SCR PHASE CONTROLLER**

**BL 120A** Features :

Operating temperature ..... 0 ... +70 °C

AC peak supply current (pin 9) : ..... max. 60 mA

Input current (pin 14) : ..... max. 20 mA

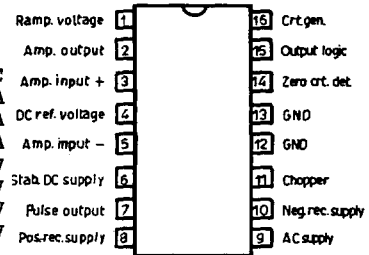
Input diodes peak current : ..... max. 1 A

Positive clamp voltage ( $V_{8-12}$ ) : ..... max. 15 V

Negative clamp voltage ( $V_{10-12}$ ) : ..... max. 15 V

Differential input voltage ( $V_{1-2}$ ) : ..... -7 ... +7 V

Differential input voltage ( $V_{3-5}$ ) : ..... -8 ... +8 V



PACKAGE MP-117 / TOP VIEW

**TRIAC/SCR BURST CONTROLLER**

**BL 121A** Features :

Operating temperature ..... 0 ... +70 °C

AC peak supply current (pin 9) : ..... max. 60 mA

Input voltage (pin 14) : ..... max. 20 V

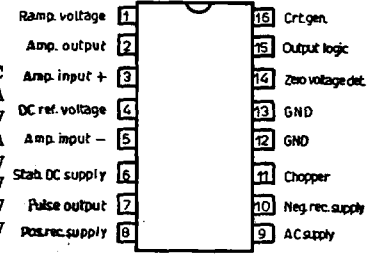
Input diodes peak current : ..... max. 1 A

Positive clamp voltage ( $V_{8-12}$ ) : ..... max. 15 V

Negative clamp voltage ( $V_{10-12}$ ) : ..... max. 15 V

Differential input voltage ( $V_{1-2}$ ) : ..... -7 ... +7 V

Differential input voltage ( $V_{3-5}$ ) : ..... -8 ... +8 V



PACKAGE MP-117 / TOP VIEW

**HALL EFFECT PICKUP IGNITION CONTROLLER**

**BL 497B** Features :

Operating temperature : ..... -50 / +125 °C

Supply voltage : ..... 3.5 ... 28 V

Current limit sensing voltage : ..... 260 ... 370 mV

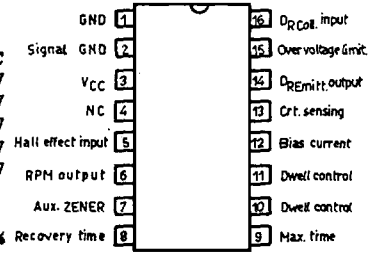
RPM Saturation voltage (25 mA) : ..... 0.8 V

Darlington driver saturation (180 mA) : ..... 0.9 V

Reference voltage : ..... 1.2 ... 1.3 V

$I_{11C}/I_{11D}$  : ..... 7.8 ... 22

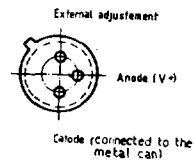
Percentage of output current determining SRC : ..... 90 ... 98 %



PACKAGE DIL 16 / TOP VIEW

**TEMPERATURE LINEAR TRANSDUCERS**

<b>BM 135A</b>	Features :	<b>BM 135A</b>	<b>BM 335A</b>	<b>BM 335</b>
<b>BM 335A</b>	Operating temperature :	-55/+125	-10/+100	-10/+100 °C
<b>BM 335</b>	Max. initial error :	± 1	± 3	± 6 °C
	Typ. nonlinearity over full temperature range :	± 0.5	± 1.5	± 1.5 °C
	Temperature sensitivity :	typ. 10mV/°C		
	Forward current :	typ. 1 mA		
		max. 10 mA		
	Reverse current :	max. 10 mA		



PACKAGE TO-39 / TOP VIEW

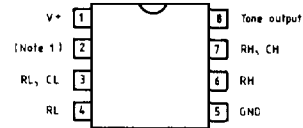
**ANALOGUE INTEGRATED CIRCUITS**

**CONTROL, INDUSTRIAL**



**TONE RINGERS FOR TELEPHONE BELL REPLACEMENT**

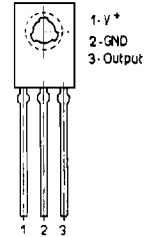
<b>SML 8204</b>	Features :	
	Operating temperature :	-25...+70°C
<b>SML 8205</b>	Supply voltage :	max. 36 V
	Supply initiation voltage :	17 ... 21 V
	Supply initiation current :	1.4 ... 4.2mA
	Sustaining voltage :	9.7 ... 12 V
	Sustaining current :	min. 0.7mA
	Trigger voltage (SML 8204 only) :	min. 10.5 V
	Disable voltage (SML 8204 only) :	max. 0.8 V



Note 1. Pin 2 function for:  
 - SML 8204 : Trigger input  
 - SML 8205 : Init. current  
**PACKAGE MP-48 / TOP VIEW**

**HALL-EFFECT MAGNETIC THRESHOLD SENSORS**

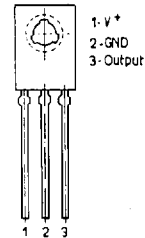
<b>BS 053</b>	Features : Open collector output	
	Operating temperature :	0 ...+70 °C
<b>BS 057</b>	Supply voltage :	4.5...5.5 V
	Supply current :	max. 6.5 mA
<b>BS 255</b>	Output voltage in "ON" state (I <sub>O</sub> =18mA):	max. 400 mV
	Output current in "OFF" state :	max. 10 uA
	"ON/OFF" magnetic thresholds :	BS 053 5 / 30 mT
		BS 057 5 / 70 mT
		BS 255 25 / 50 mT



**PACKAGE TO-126 (SOT 32)**

**HALL-EFFECT MAGNETIC THRESHOLD SENSORS**

<b>BSM 231</b>	Features :	<b>BSM 231, 232</b>	<b>BSM 233, 234</b>
	Operating temperature :	0 ...+70 °C	0 ...+70 °C
<b>BSM 232</b>	Supply voltage :	max. 25 V	max. 10 V
	Supply current :	max. 6.5 mA	max. 10 mA
<b>BSM 233</b>	"ON" state output voltage:	max. 400 mV	max. 500 mV
	"OFF" state out. current :	max. 10 uA	max. 250 uA
<b>BSM 234</b>	Magnetic thresholds :	BSM 231, BSM 233 5... 30 mT	BSM 232 25... 50 mT
		BSM 234 5... 70 mT	



**PACKAGE TO-126 (SOT 32)**