

Especially economical and universal operational amplifiers in plastic plug-in packages (14 pins) 20 A 14 DIN 41866, which by their excellent performance qualities are well suited for a wide range of applications. No external components for frequency compensation are required.

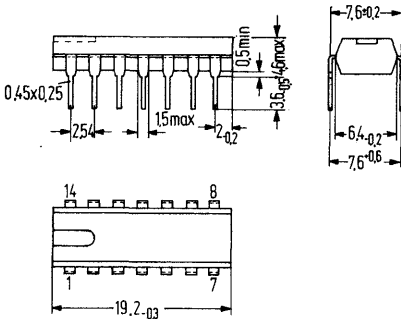
For single amplifier performance, see TAA 761 data sheet.

### Additional features:

- Wide common-mode range
- Large supply voltage range
- Protection against destruction
- High output current
- Large control range
- No frequency compensation

Type	Ordering codes
TAA 4761 A	Q67000-A1032
TAA 4765 A	Q67000-A1033

### Package outlines



Weight approx. 1.1 g  
Plastic plug-in package 20 A 14 DIN 41866 (14 pins)  
Dimensions in mm

### Maximum ratings

Supply voltage  
Output current  
Differential input voltage  
Junction temperature  
Storage temperature  
Thermal resistance system – ambient air

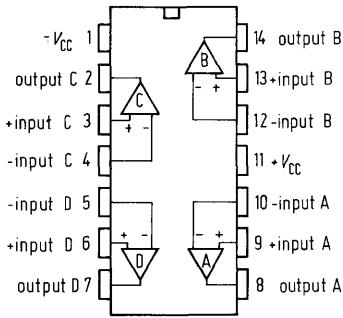
	TAA 4761 A TAA 4765 A	
$V_{CC}$	$\pm 15$	V
$I_g$	70	mA
$V_{ID}$	$\pm V_{CC}$	
$T_j$	150	$^{\circ}\text{C}$
$T_s$	-55 to +125	$^{\circ}\text{C}$
$R_{thSamb}$	140	K/W

### Range of operation

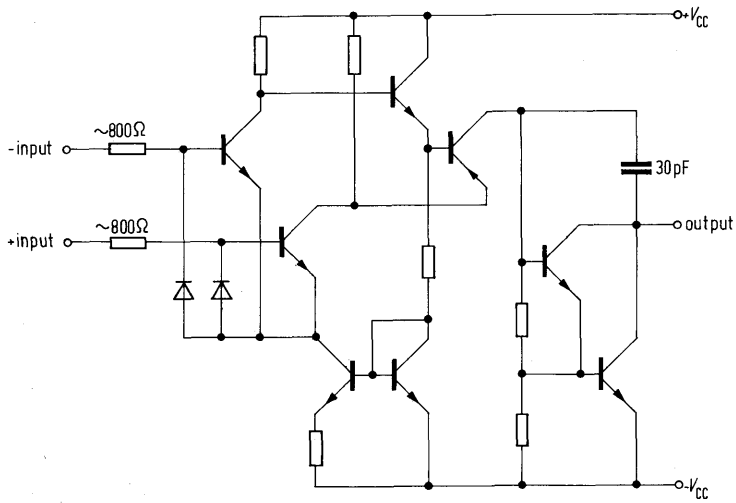
Supply voltage  
Ambient temperature in operation (TAA 4761 A)  
(TAA 4765 A)

$V_{CC}$	$\pm 2$ to $\pm 15$	V
$T_{amb}$	0 to +70	$^{\circ}\text{C}$
$T_{amb}$	-25 to +85	$^{\circ}\text{C}$

**Pin configuration**



**Circuit of one operational amplifier**



**Operating characteristics**

( $V_{cc} = \pm 15$  V;  $T_{amb} = 25$  °C)

		TAA 4761 A		TAA 4765 A		
		min	typ	max		
Supply current	$I_{cc}$		1	3		mA
Input offset voltage ( $R_G = 50$ $\Omega$ )	$V_{io}$	-6		6		mV
Input offset current	$I_{io}$	-300	$\pm 80$	300		nA
Input current	$I_i$		.5	1.0		$\mu$ A
Output voltage: $R_L = 2$ k $\Omega$	$V_{qpp}$	14.9		-14		V
$R_L = 620$ $\Omega$	$V_{qpp}$	14.9		-12.5		V
Input impedance ( $f =$ kHz)	$Z_i$		200			k $\Omega$
Open-loop voltage gain: $R_L = 2$ k $\Omega$ , $f = 100$ Hz	$G_v$	80	85			dB
$R_L = 10$ k $\Omega$ , $f = 100$ Hz	$G_v$		90			dB
Output leakage current	$I_{glk}$			10		$\mu$ A
Input common-mode range ( $R_L = 2$ k $\Omega$ )	$V_{iCM}$	12	$\pm 13.5$	-12		V
Common-mode rejection ratio ( $R_L = 2$ k $\Omega$ )	$CMRR$	65	79			dB
Sensitivity to supply voltage variations ( $G_v = 100$ )	$\frac{\Delta V_{io}}{\Delta V_{cc}}$		25	100		$\mu$ V/V
Temp. coefficient of $V_{io}$ ( $R_G = 50$ $\Omega$ )	$\alpha_{vio}$		6			$\mu$ V/K
Temp. coefficient of $I_{io}$ ( $R_G = 50$ $\Omega$ )	$\alpha_{Iio}$		.3			nA/K
Noise voltage (to spec. DIN 45405, measured at input $R_s = 2,5$ k $\Omega$ )	$V_N$		3			$\mu$ V
Output saturation voltage ( $I_q = 10$ mA)	$V_{qsat}$			1		V
( $V_{cc} = \pm 5$ V)						
Supply current	$I_{cc}$		1			mA
Input offset voltage	$V_{io}$	-6		6		mV
Input offset current	$I_{io}$	-300		300		nA
Input current	$I_i$			1		$\mu$ A
Output voltage ( $R_L = 2$ k $\Omega$ )	$V_{qpp}$	4.9		-4		V
Open-loop voltage gain ( $R_L = 2$ k $\Omega$ , $f = 100$ Hz)	$G_v$	70				dB