

Especially economical and universal operational amplifiers in package 5 G 8 DIN 41873 (TO 99) which by their excellent performance qualities are well suited for a wide range of applications. No external components for frequency compensation are required. TAA 2761 A (8 pins) in plastic plug-in package.

For single amplifier performance, see TAA 761 data sheet.

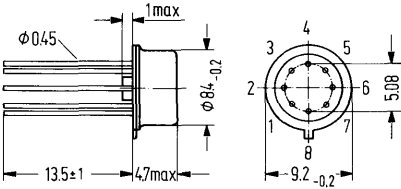
Additional features:

- Wide common-mode range
- Large supply voltage range
- Wide temperature range (TAA 2762)
- Protection against destruction
- High output current
- Large control range
- No frequency compensation

Type	Ordering codes
TAA 2761	Q67000-A1027
TAA 2761 A	Q67000-A1028
TAA 2762	Q67000-A1029
TAA 2765	Q67000-A1030
TAA 2765 A	Q67000-A1031

Package outlines

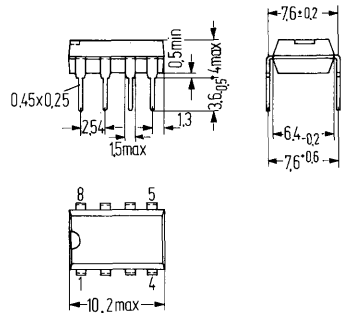
TAA 2761, TAA 2762, TAA 2765



Package similar to 5 G 8 DIN 41873 (similar TO-99) weight approx. 1.1 g

Dimensions in mm

TAA 2761 A, TAA 2765 A



Plastic plug-in package, 8 pins; 20 A 8 DIN 41866, weight approx. .7 g

Maximum ratings

Supply voltage	
Output current	
Differential input voltage	
Junction temperature	
Storage temperature	
Thermal resistance:	
System-case (TAA 2761/2/5)	
System-ambient air (TAA 2761/2/5)	
System-ambient air (TAA 2761 A/2765 A)	

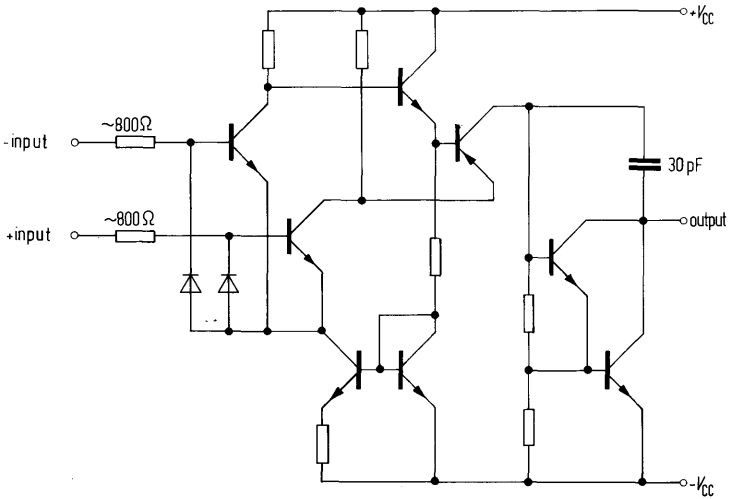
	TAA 2761/A TAA 2762 TAA 2765/A	
V_{CC}	± 15	V
I_Q	70	mA
V_{iD}	$\pm V_{CC}$	
T_j	150	$^{\circ}\text{C}$
T_s	-55 to +125	$^{\circ}\text{C}$
$R_{thSCase}$	80	K/W
R_{thSamb}	190	K/W
R_{thSamb}	140	K/W

Range of operation

Supply voltage	
Ambient temperature in operation	
TAA 2761/A	
TAA 2762	
TAA 2765/A	

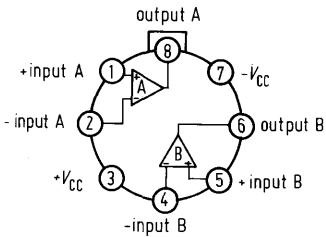
V_{CC}	± 2 to ± 15	V
T_{amb}	0 to +70	$^{\circ}\text{C}$
T_{amb}	-55 to +125	$^{\circ}\text{C}$
T_{amb}	-25 to +85	$^{\circ}\text{C}$

Circuit of one operational amplifier

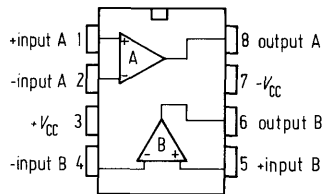


Pin configuration

TAA 2761
TAA 2762
TAA 2765



TAA 2761 A
TAA 2765 A



Operating characteristics ($V_{cc} = \pm 15\text{ V}$)		TAA 2761/A TAA 2765/A $T_{amb} = 25\text{ }^\circ\text{C}$			TAA 2762 $T_{amb} = 25\text{ }^\circ\text{C}$			$T_{amb} = -55$ to $+125\text{ }^\circ\text{C}$		
		min	typ	max	min	typ	max	min	max	
		Supply current	I_{cc}		.5	1.5		.5	1.5	
Input offset voltage ($R_G = 50\ \Omega$)	V_{io}	-6		6	-4		4	-6	6	mV
Input offset current	I_{io}	-300	± 80	300	-100	± 50	100	-300	300	nA
Input current	I_i		.5	1.0		.3	.7		1.0	μA
Output voltage: $R_L = 2\ \text{k}\Omega$	V_{opp}	14.9		-14	14.9		-14	14.8	-14	V
$R_L = 620\ \Omega$	V_{app}	14.9		-12.5	14.9		-12.5	14.8		V
Input impedance ($f = 1\ \text{kHz}$)	Z_i		200			200				k Ω
Open loop voltage gain $R_L = 2\ \text{k}\Omega, f = 100\ \text{Hz}$	G_v	80	85		85	87		80		dB
$R_L = 10\ \text{k}\Omega, f = 100\ \text{Hz}$	G_v		90			92				dB
Output leakage current	I_{qlik}		1	10		1	10			μA
Input common mode range ($R_L = 2\ \text{k}\Omega$)	V_{ICM}	12	± 13.5	-12	12	± 13.5	-12			V
Common mode rejection mode ($R_L = 2\ \text{k}\Omega$)	$CMRR$	65	79		70	81				dB
Sensitivity to supply voltage variations ($G_v = 100$)	$\frac{\Delta V_{io}}{\Delta V_{cc}}$		25	100		25	100			$\mu\text{V/V}$
Temp. coefficient of V_{io} ($R_G = 50\ \Omega$)	$\alpha_{V_{io}}$		6			6	25			$\mu\text{V/K}$
Temp. coefficient of I_{io} ($R_G = 50\ \Omega$)	$\alpha_{I_{io}}$.3			.3	1.5			nA/K
Noise voltage (to spec. DIN 45405; measured at input $R_s = 2.5\ \text{k}\Omega$)	V_N		3			3				μV
Output saturation voltage ($I_q = 10\ \text{mA}$) ($V_{cc} = \pm 5\ \text{V}$)	V_{qsat}			1			1			V
Supply current	I_{cc}		.5			.5				mA
Input offset voltage	V_{io}	-6		6	-4		4			mV
Input offset current	I_{io}	-300		300	-100		100			nA
Input current	I_i			1.0			.6			μA
Output voltage ($R_e = 2\ \text{k}\Omega$)	V_{app}	4.9		-4	4.9		-4	4.8	-4	V
Open loop voltage gain ($R_e = 2\ \text{k}\Omega, f = 1\ \text{Hz}$)	G_v	70			70					dB