PNP BC261 – BC262 – BC263

LOW NOISE GENERAL PURPOSE AUDIO AMPLIFIERS

They are silicon planar epitaxial PNP transistors mounted in TO-18 metal package.
The BC261 is intended for audio amplifier driver tages.
The BC262 is intended for general purpose applications.
The BC262 is intended for low noise, high gain pre-amplifier tage.
Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol			BC261	BC262	BC263	Unit
V_{CEO}	Collector-Emitter Voltage (I_B =0)		-45	-25	-25	V
V_{CES}	Collector- Emitter Voltage (V_{BE} =0)		-50	-30	-30	V
V_{EBO}	Emitter-Base Voltage (I_C =0)		-5			V
I_C	Collector Current		-100			mA
I_{CM}	Collector Peak Current		-200			mA
P_D	Total Power Dissipation	@ T_{amb} = 25°	300			mW
T_J	Junction Temperature		175			℃
T_{Stg}	Storage Temperature range		-55 to +150			℃

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit
I_{CBO}	Collector Cutoff Current I_E = 0	V_{CB} =-45 V	BC261	-	-	-50	nA
		V_{CB} = -45 V T_j = 150℃	BC261	-	-	-50	µA
		V_{CB} =-20 V	BC262	-	-	-50	nA
			BC263				
		V_{CB} = -20 V T_j = 150℃	BC262	-	-	-50	µA
			BC263				
V_{CEO}	Collector-Emitter Breakdown Voltage	I_C = -2 mA I_B = 0	BC261	-45	-	-	V
			BC262	-25	-	-	
			BC263	-25	-	-	
V_{CES}	Collector- Emitter Voltage (V_{BE} =0)	I_C = -10 µA V_{BE} = 0	BC261	-50	-	-	V
			BC262	-30	-	-	
			BC263	-30	-	-	
V_{EBO}	Emitter-Base Breakdown Voltage	I_E = -10 µA I_C = 0	BC261	-5	-	-	V
			BC262				
			BC263				

PNP BC261 – BC262 – BC263

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage	I_C =-10 mA I_B =-0.5 mA	BC261	-	-	-300	mV
			BC262				
			BC263				
		I_C =-100 mA I_B =-5 mA	BC261	-	-500	-	
			BC262				
			BC263				
$V_{BE(SAT)}$	Base-Emitter Saturation Voltage	I_C =-10 mA I_B =-0.5 mA	BC261	-	-	-900	
			BC262				
			BC263				
		I_C =-100 mA I_B =-5 mA	BC261	-	-850	-	
			BC262				
			BC263				
H_{fe}	Small Signal Current Gain	I_C= -2 mA V_{CE}= 5 V f = 1 KHz	BC261A	125	-	260	-
			BC262A				
			BC263A				
			BC261B	240	-	500	
			BC262B				
			BC263B				
			BC261C	450	-	900	
			BC262C				
			BC263C				
f_T	Transition frequency	I_C =-10 mA V_{CE} =-5 V f = 100 MHz	BC261	150	-	-	MHz
			BC262				
			BC263				
F	Noise figure	I_C = -200 µA V_{CE} =-5 V f = 1kHz R_g=2kΩ	BC261	-	-	10	db
			BC262	-	-	10	
			BC263	-	-	4	
C_C	Collector capacitance	I_E = 0 V_{CB} =-10 V f = 1MHz	BC261	-	-	6	pF
			BC262				
			BC263				

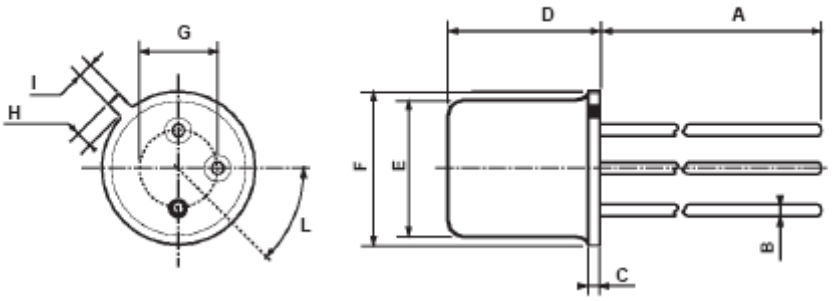
THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R_{thJ-a}	Thermal Resistance, Junction to mounting base	500	℃/W
R_{thJ-c}	Thermal Resistance, Junction to ambient in free air	200	℃/W

PNP BC261 – BC262 – BC263

ECHANICAL DATA CASE TO-18

DIMENSIONS (mm)		
	min	max
A	12.7	-
B	-	0.49
C	0.9	-
D	-	5.3
E	-	4.9
F	-	5.8
G	2.54	-
H	-	1.2
I	-	1.16
L	45°	-



Pin 1 :	emitter
Pin 2 :	base
Pin 3 :	Collector
Case :	Collector

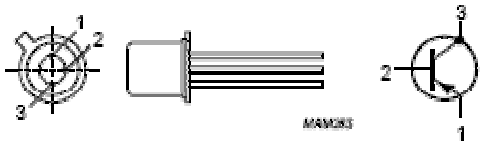


Fig.1 Simplified outline (TO-18) and symbol.

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