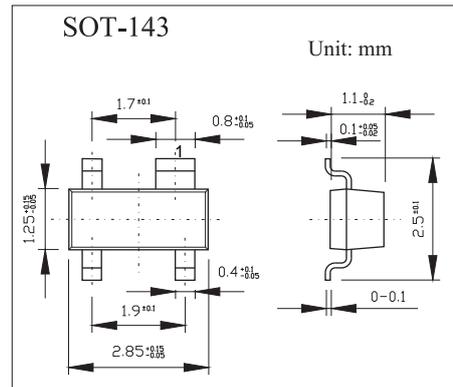
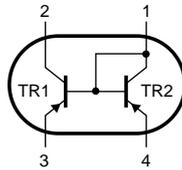


# BCV62

■ Features

- High current gain
- Low collector-emitter saturation voltage



■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-30	V
Collector-emitter voltage	$V_{CE0}$	-30	V
Emitter-base voltage	$V_{EB0}$	-6	V
Collector current	$I_c$	-100	mA
Power dissipation	$P_D$	250	mW
Thermal resistance from junction to ambient	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Operating and Storage and Temperature Range	$T_j, T_{STG}$	-55 to +150	$^\circ\text{C}$

# BCV62

■ Electrical Characteristics Ta = 25°C

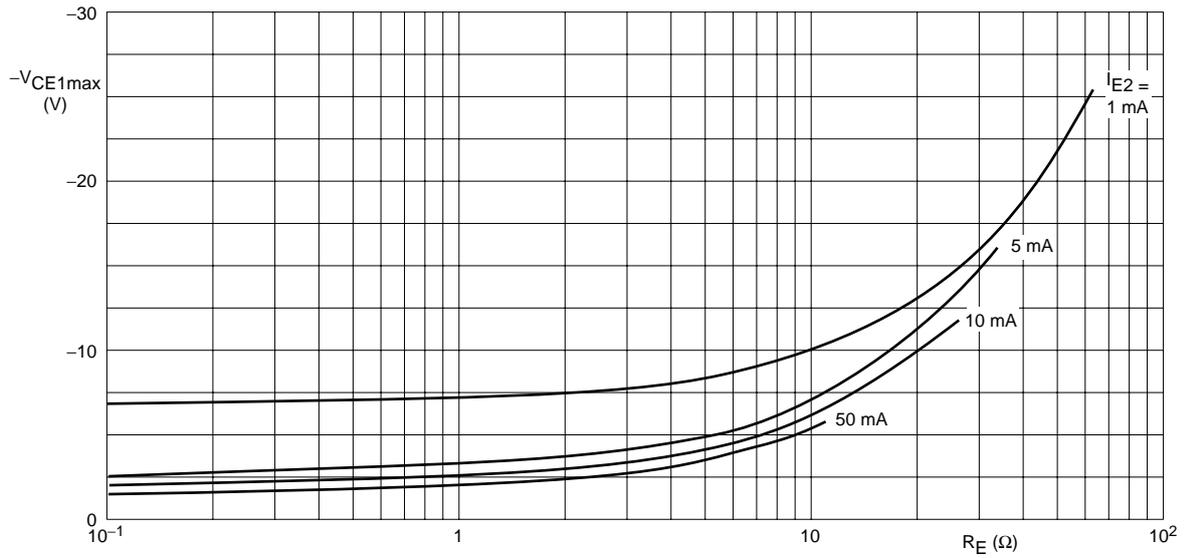
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Transistor TR1						
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = -10 μA, I <sub>E</sub> = 0	-30			V
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -10 mA, I <sub>B</sub> = 0	-30			V
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	I <sub>C</sub> = -10 μA, I <sub>C</sub> = 0	-6			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = -30V, I <sub>E</sub> = 0			-15	nA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> = 0			-100	nA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -100μA	100			
		V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA	100		800	
collector-emitter saturation voltage *	V <sub>CE(sat)</sub>	I <sub>C</sub> = -10 mA; I <sub>B</sub> = -0.5 mA			-0.3	V
		I <sub>C</sub> = -100 mA; I <sub>B</sub> = -5 mA			-0.65	V
base-emitter saturation voltage *	V <sub>BE(sat)</sub>	I <sub>C</sub> = -10 mA; I <sub>B</sub> = -0.5 mA		-0.7		V
		I <sub>C</sub> = -100 mA; I <sub>B</sub> = -5 mA		-0.85		V
Collector capacitance	C <sub>c</sub>	I <sub>E</sub> = i <sub>e</sub> = 0; V <sub>CB</sub> = -10 V; f = 1 MHz		4.5		pF
Transition frequency	f <sub>T</sub>	I <sub>C</sub> = -10 mA; V <sub>CE</sub> = -5 V; f = 100 MHz	100			MHz
Noise figure	F	I <sub>C</sub> = -200μA; V <sub>CE</sub> = -5 V; R <sub>s</sub> = 2kΩ; f = 1 kHz; B = 200 Hz			10	dB
Transistor TR2						
Base-emitter forward voltage	V <sub>EBS</sub>	V <sub>CB</sub> = 0; I <sub>E</sub> = 250 mA			1.5	V
		V <sub>CB</sub> = 0; I <sub>E</sub> = 10μA	0.4			mV
DC current gain	h <sub>FE</sub>	I <sub>C</sub> = -2 mA; V <sub>CE</sub> = -5 V	125		250	
BCV62A						
BCV62B			220		475	
BCV62C			420		800	

\* pulse test: Pulse Width ≤ 300μs, Duty Cycle ≤ 2.0%.

■ Marking

TYPE	BCV61	BCV61A	BCV61B	BCV61C
Marking	3MP	3JP	3KP	3LP

■ Typical Characteristics



$\frac{I_{C1}}{I_{E2}} = 1.3$  (see Fig.3).

Fig.1 Maximum collector-emitter voltage as a function of emitter resistance.