

2SA1862

- 1) High breakdown voltage. ($BV_{CEO} = -400V$)
- 2) Low saturation voltage.
(Typ. $V_{CE(sat)} = -0.3V$ at $I_C / I_B = -500mA / -100mA$)
- 3) High switching speed, typically $t_f = 0.4\mu s$ at $I_C = -1A$.
- 4) Wide SOA (safe operating area).

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CB0}	-400	V
Collector-emitter voltage	V_{CE0}	-400	V
Emitter-base voltage	V_{EB0}	-7	V
Collector current	I_C	-2	A (DC)
		-4	A (Pulse)
Collector power dissipation	P_C	1	W
		10	W ($T_C = 25^\circ\text{C}$)
Junction temperature	T_J	150	$^\circ\text{C}$
Storage temperature	T_{St0}	-55~+150	$^\circ\text{C}$

ROHM : CPT3
EIAJ : SC-63

Dimensions (mm):

- Base (Gate): 1.0
- Collector (Drain): 0.5
- Emitter (Source): 0.5
- Pin 1: 0.5
- Pin 2: 0.5
- Pin 3: 0.5
- Pin 4: 0.5
- Pin 5: 0.5
- Pin 6: 0.5
- Pin 7: 0.5
- Pin 8: 0.5
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- Pin 99: 0.5
- Pin 100: 0.5

Type	2SA1862
Package	CPT3
h _{FE}	P
Code	TL
Basic ordering unit (pieces)	2500

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV_{CBO}	-400	-	-	V	$I_C = -50\mu A$
Collector-emitter breakdown voltage	BV_{CEO}	-400	-	-	V	$I_C = -1mA$
Emitter-base breakdown voltage	BV_{EBO}	-7	-	-	V	$I_E = -50\mu A$
Collector cutoff current	I_{CBO}	-	-	-10	μA	$V_{CB} = -400V$
Emitter cutoff current	I_{EBO}	-	-	-10	μA	$V_{EB} = -5V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-0.3	-0.5	V	$I_C/I_B = -0.5A / -0.1A$
Base-emitter saturation voltage	$V_{BE(sat)}$	-	-	-1.2	V	$I_C/I_B = -0.5A / -0.1A$
DC current transfer ratio	h_{FE}	82	-	180	-	$V_{CE} = -5V, I_C = -0.1A$
Transition frequency	f_T	-	18	-	MHz	$V_{CB} = -10V, I_E = 0.1A, f = 5MHz$
Output capacitance	C_{ob}	-	30	-	pF	$V_{CE} = -10V, I_E = 0A, f = 1MHz$
Turn-on time	t_{on}	-	0.2	-	μs	$I_C = -1A, R_L = 150\Omega$
Storage time	t_{stg}	-	1.8	-	μs	$I_{B1} = -I_{B2} = -0.2A$
Fall time	t_f	-	0.4	-	μs	$V_{CC} = 150V$