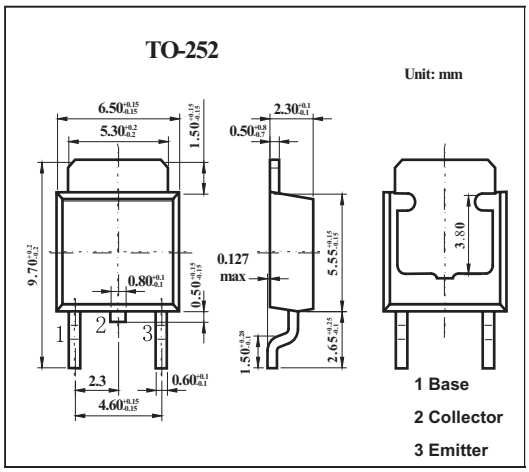
TY Semicondutor®

Product specification

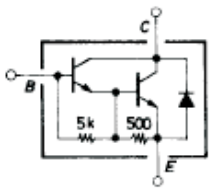
2SD1817

■ Features

- High DC current gain.



■ Electrical Connection



Unit (resistance : Ω)

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	60	V
Emitter-base voltage	V_{EBO}	6	V
Collector current	I_C	3	A
Collector current (pulse)	I_{CP}	6	A
Collector dissipation	P_C	1	W
T_a = 25℃		15	W
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 60V , I_E = 0			10	μA
Emitter cutoff current	I_{EBO}	V_{EB} = 5V , I_C = 0			2.5	mA
DC current Gain	h_{FE}	V_{CE} = 2V , I_C = 1A	2000			
		V_{CE} = 2V , I_C = 2A	1000			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 2A , I_B = 4mA			1.5	V
Base-to-emitter saturation voltage	$V_{BE(sat)}$	I_C = 2A , I_B = 4mA			2.0	V
Collector-to-base breakdown voltage	$V_{(BR)CBO}$	I_C = 1mA , I_E = 0	80			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 25mA , R_{BE} = ∞	60			V