

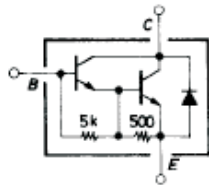
NPN Epitaxial Planar Silicon Transistor

2SD1817

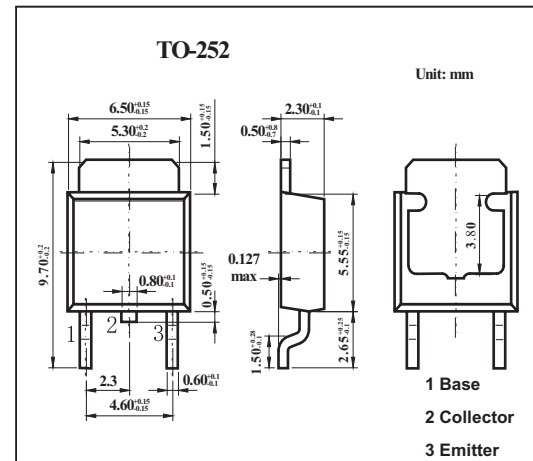
■ Features

- High DC current gain.

■ Electrical Connection



Unit (resistance : Ω)

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	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
$T_a = 25^\circ\text{C}$		15	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

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