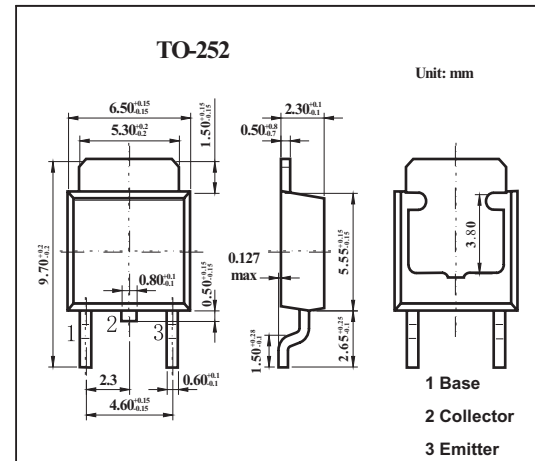


NPN Silicon Epitaxial Transistor

2SD992-Z

■ Features

- Low $V_{CE(sat)}$.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	30	V
Collector-emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	5	V
Collector current (DC)	I_C	2	A
Collector Current (pulse) *	I_{CP}	3	A
Total power dissipation	P_T	2	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* Pulse Test $PW \leq 10\text{ms}$, Duty Cycle $\leq 50\%$.

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I_{cBO}	$V_{CB} = 20\text{ V}$, $I_E = 0$			10	nA
DC current gain *	h_{FE}	$V_{CE} = 0.5\text{ V}$, $I_C = 0.1\text{ A}$	35		200	
		$V_{CE} = 0.5\text{ V}$, $I_C = 2.0\text{ A}$	50			
Collector saturation voltage *	$V_{CE(sat)}$	$I_C = 2.0\text{ A}$, $I_B = 40\text{ mA}$		0.3	0.5	V
Base saturation voltage *	$V_{BE(sat)}$	$I_C = 2.0\text{ A}$, $I_B = 40\text{ mA}$		0.95	1.5	V

* Pulsed: $PW \leq 350\ \mu\text{s}$, duty cycle $\leq 2\%$

■ h_{FE} Classification

Marking	N	M	L	K
h_{FE}	35~80	60~120	80~120	100~200