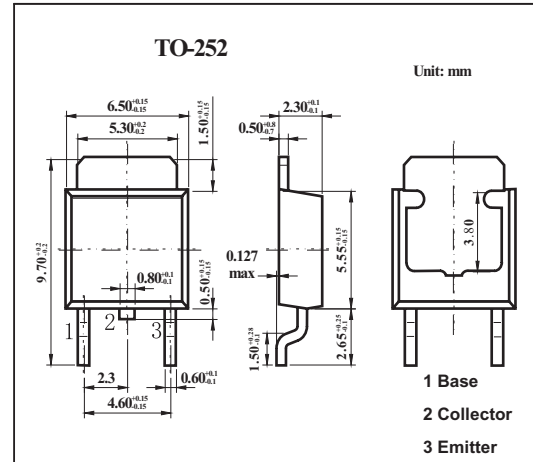


## NPN Silicon Epitaxial Transistor

## 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	$V_{CE0}$	30	V
Emitter-base voltage	$V_{EB0}$	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	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	$I_{cB0}$	$V_{CB} = 20\text{ V}$ , $I_E = 0$			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