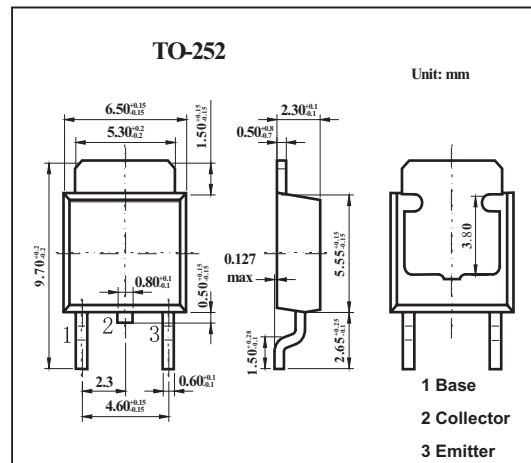


## 2SD1259;2SD1259A

### ■ Features

- High forward current transfer ratio hFE.
- Satisfactory linearity of forward current transfer ratio hFE.



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	80	V
		100	V
Collector-emitter voltage	V <sub>CEO</sub>	60	V
		80	V
Emitter-base voltage	V <sub>EB0</sub>	6	V
Collector current	I <sub>C</sub>	3	A
Peak collector current	I <sub>CP</sub>	6	A
Base current	I <sub>B</sub>	1	A
Collector power dissipation Ta = 25°C	P <sub>C</sub>	1.3	W
		40	W
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-emitter voltage	V <sub>CEO</sub>	I <sub>C</sub> = 25 mA, I <sub>B</sub> = 0	60			V
			80			V
Collector-base cutoff current	I <sub>CB0</sub>	V <sub>CB</sub> = 80 V, I <sub>E</sub> = 0			100	μA
		V <sub>CB</sub> = 100 V, I <sub>E</sub> = 0			100	μA
Collector-emitter cutoff current	I <sub>CEO</sub>	V <sub>CE</sub> = 40 V, I <sub>B</sub> = 0			100	μA
Emitter-base cutoff current	I <sub>EB0</sub>	V <sub>EB</sub> = 6 V, I <sub>C</sub> = 0			100	μA
Forward current transfer ratio	h <sub>FE</sub>	V <sub>CE</sub> = 4 V, I <sub>C</sub> = 0.5 A	500		2500	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 2 A, I <sub>B</sub> = 0.05 A			1.0	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 12 V, I <sub>C</sub> = 0.2 A, f = 10 MHz		50		MHz

### ■ hFE Classification

Rank	Q	P	O
hFE	500~1000	800~1500	1200~2500