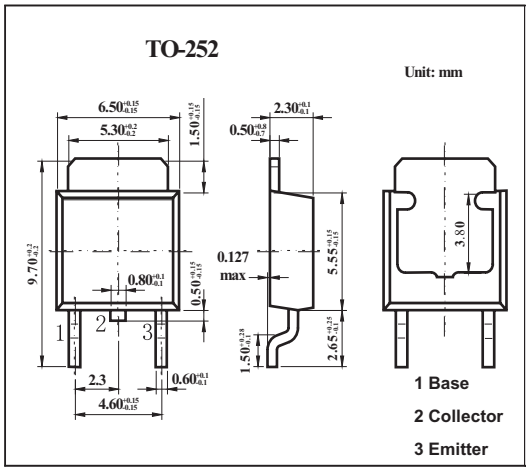
TY Semicondutor®

Product specification

2SD1259;2SD1259A



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

Parameter		Symbol	Rating	Unit
Collector-base voltage	2SD1259	V_{CBO}	80	V
	2SD1259A		100	V
Collector-emitter voltage	2SD1259	V_{CEO}	60	V
	2SD1259A		80	V
Emitter-base voltage		V_{EBO}	6	V
Collector current		I_C	3	A
Peak collector current		I_{CP}	6	A
Base current		I_B	1	A
Collector power dissipation Ta = 25℃		P_C	1.3	W
			40	W
Junction temperature		T_j	150	℃
Storage temperature		T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter		Symbol	Testconditons	Min	Typ	Max	Unit
Collector-emitter voltage	2SD1259	V_{CEO}	I_C = 25 mA, I_B = 0	60			V
	2SD1259A			80			V
Collector-base cutoff current	2SD1259	I_{CBO}	V_{CB} = 80 V, I_E = 0			100	μA
	2SD1259A		V_{CB} = 100 V, I_E = 0			100	μA
Collector-emitter cutoff current		I_{CEO}	V_{CE} = 40 V, I_B = 0			100	μA
Emitter-base cutoff current		I_{EBO}	V_{EB} = 6 V, I_C = 0			100	μA
Forward current transfer ratio		h_{FE}	V_{CE} = 4 V, I_C = 0.5 A	500		2500	
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C = 2 A, I_B = 0.05 A			1.0	V
Transition frequency		f_T	V_{CE} = 12 V, I_C = 0.2 A, f = 10 MHz		50		MHz

■ h_{FE} Classification

Rank	Q	P	O
h_{FE}	500～1000	800～1500	1200～2500