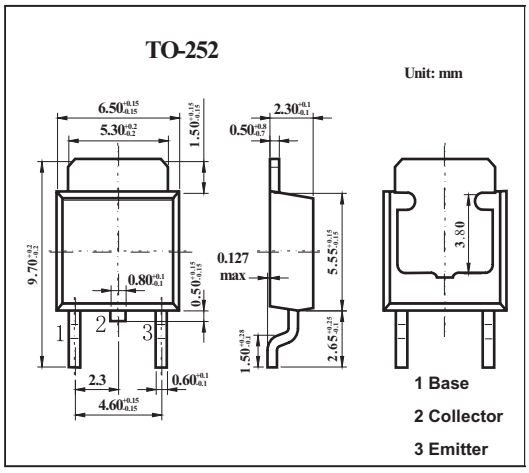
TY Semicondutor®

Product specification

2SD2453



■ Features

- High forward current transfer ratio hFE.
- Low collector-emitter saturation voltage $V_{CE(sat)}$.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	60	V
Emitter-base voltage	V_{EBO}	6	V
Collector current	I_C	2	A
Peak collector current	I_{CP}	4	A
Base current	I_B	1	A
Collector power dissipation Ta = 25℃	P_C	1	W
Tc = 25℃		10	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	V_{CEO}	I_C = 25mA, I_B = 0	60			V
Collector-base cutoff curent	I_{CBO}	V_{CB} = 80 V,I_E = 0			100	μA
Collector cutoff curent	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	V
Transition frequency	f_T	V_{CE} = 12 V, I_C = 0.2 A , f = 10 MHz		50		MHz

■ h_{FE} Classification

Rank	Q	R	S
h_{FE}	500～1000	800～1500	1200～2500