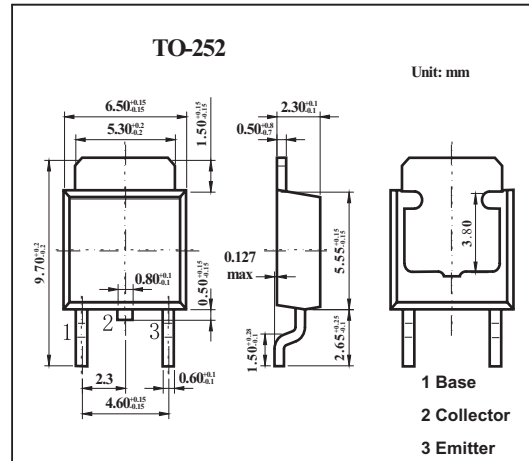


■ Features

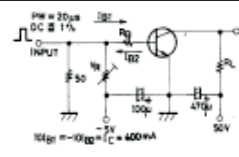
- High breakdown voltage and large current capacity.
- Fast switching speed.



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-120	V
Collector-emitter voltage	V_{CEO}	-100	V
Emitter-base voltage	V_{EBO}	-6	V
Collector current	I_C	-1	A
Collector current (pulse)	I_{CP}	-2	A
Collector dissipation	P_C	0.8	W
Collector dissipation $T_c=25^\circ\text{C}$	P_C	10	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit	
Collector cutoff current	ICBO	V _{CB} = 100V, I _E =0			100	nA	
Emitter cutoff current	IEBO	V _{EB} = 4V, I _C =0			100	nA	
DC current gain	hFE	V _{CE} = 5V, I _C = 100mA	100		400		
Gain bandwidth product	f _T	V _{CE} = 10V, I _C = 100mA		120		MHz	
Output capacitance	C _{ob}	V _{CB} = 10V, f = 1.0MHz		8.5		pF	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 400mA, I _B = 40mA		0.1	0.4	V	
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 400mA, I _B = 40mA		0.85	1.2	V	
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	120			V	
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	100			V	
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	6			V	
Turn-on time	t _{on}	 <p>Unit (resistance : Ω, capacitance : F) (For PNP, the polarity is reversed.)</p>		80		ns	
Storage time	t _{stg}				850		ns
Fall time	t _f				50		ns

■ hFE Classification

Rank	R	S	T
hFE	100~200	140~280	200~400