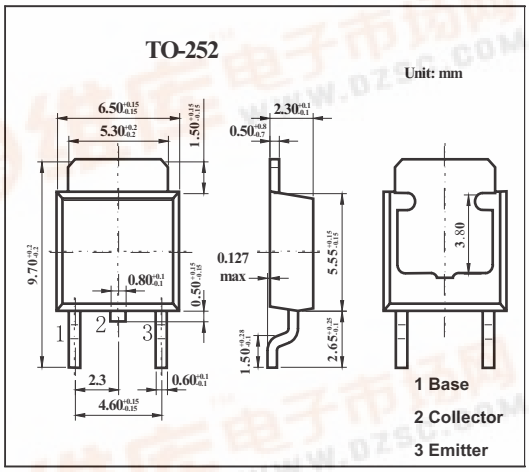
NPN Silicon Triple Diffused Transistor

2SC3405



Features

- Excellent Switching Times
  t_r=1.0μs (Max.) tf=1.0μs (Max.) at I_C=0.3A
- High colletor Breakdown Voltage: V_{CEO}=800V

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	900	V
Collector to emitter voltage	V_{CEO}	800	V
Emitter to base voltage	V_{EBO}	8	V
Collector current (DC)	I_C	0.8	A
Collector current (Pulse)	I_{cp}	1.5	A
Base Current	I_B	0.2	A
Total Power dissipation Ta = 25℃	P_C	1	W
T_C = 25℃		20	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 cutoff current	I_{CBO}	V_{CB}=800V,I_E=0			100	μA
emitter cutoff current	I_{EBO}	V_{EB}=8V,I_C=0			1	mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=1mA,I_C=0	900			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	800			V
DC current Gain	h_{FE}	V_{CE}=5V,I_C=1mA	6			
		V_{CE}=5V,I_C=0.3A	10			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=0.3A,I_B=0.06A			0.5	V
Base- Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=0.3A,I_B=0.06A			1.2	V
Switching time turn-0n time	tr				1	μs
Switching storage time	tstg				4.0	μs
Switching fall time	tf				1	μs