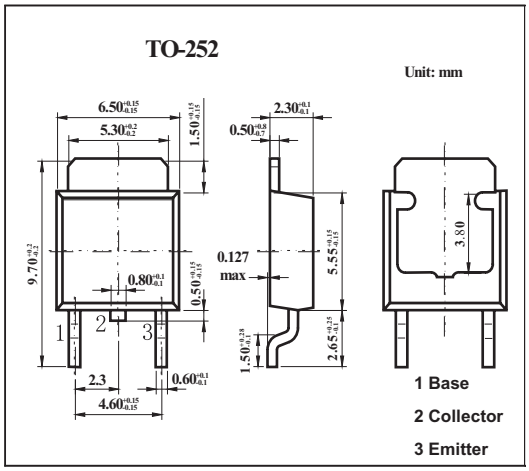
NPN Silicon Triple Diffused

2SC3233



■ Features

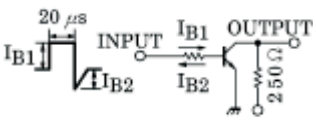
- Excellent Switching Times

  t_r=1.0μs (Max.) tf=1.0μs (Max.) at I_C=0.8A
- High colletor Breakdown Voltage: V_{CEO}=400V

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	500	V
Collector to emitter voltage	V_{CEO}	400	V
Emitter to base voltage	V_{EBO}	7	V
Collector current	I_C	2	A
Base Current	I_B	0.5	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}=400V,I_E=0			100	μA
emitter cutoff current	I_{EBO}	V_{EB}=7V,I_C=0			1	mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=1mA,I_C=0	500			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	400			V
DC current Gain	h_{FE}	V_{CE}=5V,I_C=0.1A	20			
		V_{CE}=5V,I_C=1A	8			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=0.1A,I_B=0.2A			1	V
Base- Emitter Voltage	$V_{BE(sat)}$	I_C=0.1A,I_B=0.2A			1.5	V
Switching time turn-0n time	tr				1.0	μs
Switching storage time	tstg				2.5	μs
Switching fall time	tf	I_{B1} = −I_{B2} = 0.08 A, V_{CC} ≒ 200 V, DUTY CYCLE < 1%			1	μs