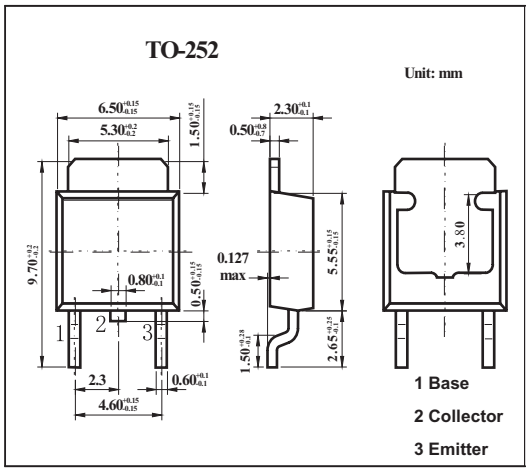
Silicon NPN Triple Diffusion Planar Type

2SC5063



■ Features

- High-speed switching
- High collector to base voltage V_{CBO}

  Wide area of safe operation (ASO)

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	500	V
Collector to emitter voltage	V_{CES}	500	V
	V_{CEO}	400	V
Emitter to base voltage	V_{EBO}	7	V
Peak collector current	I_{CP}	3	A
Collector current	I_C	1.5	A
Base current	I_B	0.5	A
Collector power dissipation TC=25℃	P_C	25	W
Ta=25℃		1.3	
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} = 500V, I_E = 0			100	μA
Emitter cutoff current	I_{EBO}	V_{EB} = 5V, I_C = 0			100	μA
Collector to emitter voltage	V_{CEO}	I_C = 10mA, I_B = 0	400			V
Forward current transfer ratio	h_{FE}	V_{CE} = 5V, I_C = 0.1A	15			
		V_{CE} = 5V, I_C = 0.8A	8			
Collector to emitter saturation voltage	$V_{CE(sat)}$	I_C = 0.8A, I_B = 0.16A			1	V
Base to emitter saturation voltage	$V_{BE(sat)}$	I_C = 0.8A, I_B = 0.16A			1.5	V
Transition frequency	f_T	V_{CE} = 10V, I_C = 0.2A, f = 10MHz		25		MHz
Turn-on time	t_{on}	I_C = 0.8A, I_{B1} = 0.16A, I_{B2} = -0.32A,			0.7	μs
Storage time	t_{stg}	V_{CC} = 150V			2	
Fall time	t_f				0.3	