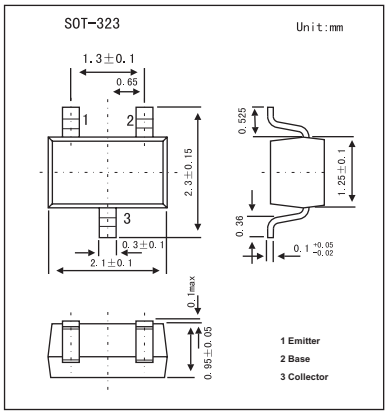
Silicon NPN Epitaxial Planar Type

2SC4755



■ Features

- High-speed switching.
- Low collector to emitter saturation voltage $V_{CE(sat)}$.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	25	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	5	V
Peak collector current	I_{CP}	300	mA
Collector current	I_C	200	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

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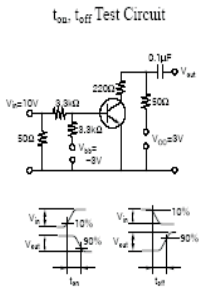
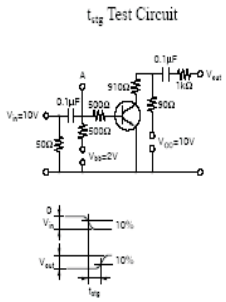
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 10V, I_E = 0			0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB} = 4V, I_C = 0			0.1	μA
Forward current transfer ratio	h_{FE}	V_{CE} = 1V, I_C = 10mA	40		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 10mA, I_B = 1mA		0.17	0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = 10mA, I_B = 1mA		0.76	1.0	V
Transition frequency	f_T	V_{CB} = 10V, I_E = -10mA, f = 200MHz	200	500		MHz
Collector output capacitance	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz		2	4	pF
Turn-on time	t_{on}	t_{on}, t_{off} Test Circuit  t_{stg} Test Circuit 		17		ns
Turn-off time	t_{off}			15		ns
Storage time	t_{stg}			7		ns

■ h_{FE} Classification

Marking	DV		
Rank	P	Q	R
h_{FE}	40～80	60～120	90～200