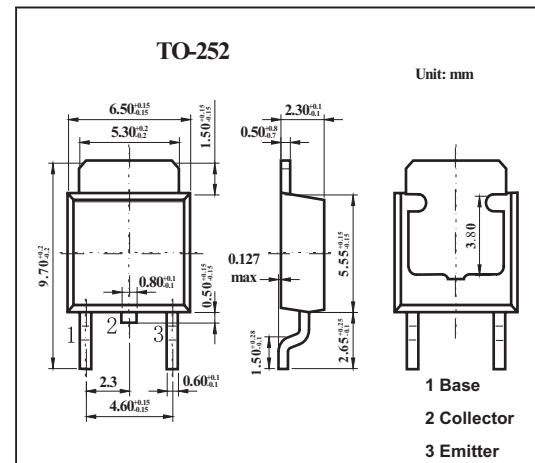


Silicon NPN Triple Diffused Type Transistor

2SC4615

■ Features

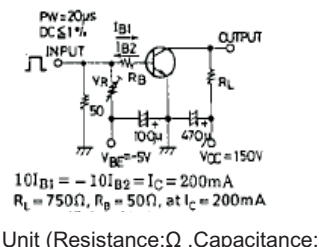
- Large current capacity ($I_C=1A$)
- High blocking voltage ($V_{CE0} \geq 400V$)

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	400	V
Collector to emitter voltage	V_{CEO}	400	V
Emitter to base voltage	V_{EBO}	5	V
Peak collector current	I_{CP}	2	A
Collector current	I_C	1	A
Collector power dissipation $T_C=25^\circ C$	P_C	1	W
		15	W
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

2SC4615

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit	
Collector cut-off Current	IcBO	Vcb=300V, Ie=0			1	μA	
Emitter Cut-off Current	IeBO	Veb=4V, Ic=0			1	μA	
DC Current Gain	hFE	Vce=10V, Ic=100mA	40		200		
Gain-Bandwidth product	fT	Vce=10V, Ic=50mA		70		MHz	
C-E Saturation Voltage	VCE(sat)	Ic=200mA, Ib=20mA			1	V	
B-E Saturation Voltage	VBE(sat)	Ic=200mA, Ib=20mA			1	V	
C-B Breakdown Voltage	V(BR)CBO	Ic=10μA, Ie=0	400			V	
C-E Breakdown Voltage	V(BR)CEO	Ic=1mA, RBE=∞	400			V	
E-B Breakdown Voltage	V(BR)EBO	Ie=10μA, Ic=0	5			V	
Output capacitance	Cob	Vcb=30V, f=1MHz		8		pF	
Turn-ON Time	ton	 <p> $PW=20\mu s$ $DC \leq 1\%$ $10I_{B1} = -10I_{B2} = I_C = 200mA$ $R_L = 750\Omega, R_E = 50\Omega, \text{ at } I_C = 200mA$ </p>		11		μs	
Storage Time	tstg				4		
Fall Time	tr			0.65			

■ hFE Classification

TYPE	C	D	E
hFE	40 to 80	60 to 120	100 to 200