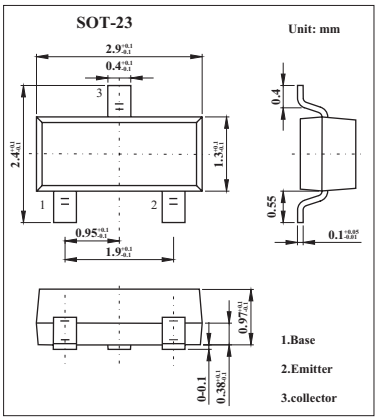
NPN Epitaxial Planar Silicon Transistor

2SC4695



■ Features

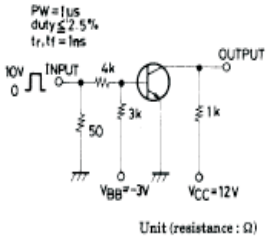
- Adoption of FBET process.
- High DC current gain.
- High V_{EBO} ($V_{EBO} \geqslant 25V$).
- High reverse h_{FE} (150 typ).
- Small ON resistance [R_{on}=1W (I_B=5mA)].

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	25	V
Collector current	I_C	500	mA
Collector current (pulse)	I_{CP}	800	mA
Base current	I_B	100	mA
Collector dissipation	P_C	250	mW
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

2SC4695

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 40V, I_E=0			0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB} = 20V, I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE} = 5V , I_C = 10mA	300		1200	
Gain bandwidth product	f_T	V_{CE} = 10V , I_C = 10mA		250		MHz
Output capacitance	C_{ob}	V_{CB} = 10V , f = 1.0MHz		3.6		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 100mA , I_B = 2mA		0.12	0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C = 100mV , I_B = 2mA		0.85	1.2	V
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = 10μA , I_E = 0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1mA , R_{BE} = ∞	20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E = 10μA , I_C = 0	25			V
Turn-on time	t_{on}			135		ns
Storage time	t_{stg}			450		ns
Fall time	t_f			100		ns

■ Marking

Marking	WT