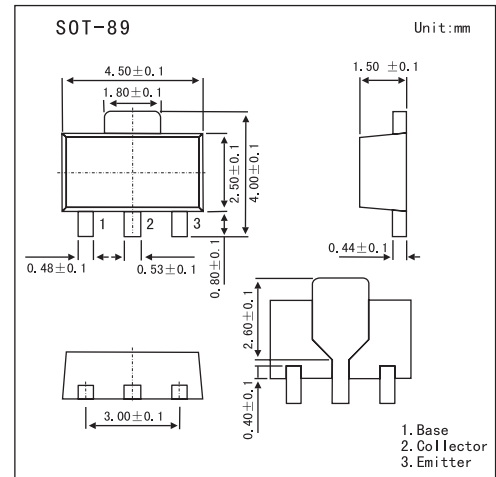


PNP Epitaxial Planar Silicon Transistors

2SD1618

■ Features

- Low collector-to-emitter saturation voltage.
- Very small size making it easy to provide highdensity,

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	20	V
Collector-emitter voltage	V_{CE0}	15	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	0.7	A
Collector current (pulse)	I_{CP}	1.5	A
Collector dissipation	P_C	500	mW
	P_C^*	1.3	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* Mounted on ceramic board (250mm2X0.8mm)

2SD1618

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	ICBO	V _{CB} = 15V , I _E = 0			0.1	μA
Emitter cutoff current	IEBO	V _{CB} = 4V , I _E = 0			0.1	μA
DC current Gain	h _{FE}	V _{CE} = 2V , I _C = 50mA	140		560	
		V _{CE} = 2V , I _C = 500mA	60			
Gain bandwidth product	f _T	V _{CE} = 10V , I _C = 50mA		250		MHz
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 5mA , I _B = 0.5mA		10	25	mV
		I _C = 100mA , I _B = 10mA		30	80	mV
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 100mA , I _B = 10mA		0.8	1.2	V
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 10μA , I _E = 0	20			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA , R _{BE} = ∞	15			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 10μA , I _C = 0	5			V
Output capacitance	C _{ob}	V _{CB} = 10V , f = 1MHz		8		pF

■ hFE Classification

Marking	DA		
	S	T	U
hFE	140~280	200~400	280~560