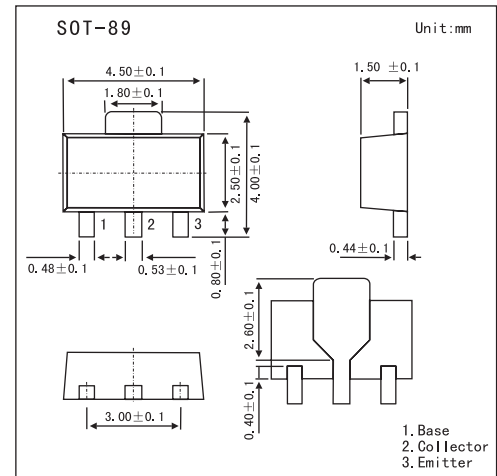


## NPN Silicon Epitaxia

## 2SC3618

## ■ Features

- World standard miniature package.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	25	V
Collector-emitter voltage	$V_{CEO}$	25	V
Emitter-base voltage	$V_{EBO}$	15	V
Collector current	$I_C$	0.7	A
Collector current (Pulse)*	$I_{CP}$	1.0	A
Total power dissipation	$P_T$	2.0	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\*  $PW \leq 10\text{ms}$ , duty cycle  $\leq 50\%$ .

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 25\text{V}$ , $I_E = 0$			100	nA
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 10\text{V}$ , $I_C = 0$			100	nA
DC current gain *	$h_{FE}$	$V_{CE} = 2.0\text{V}$ , $I_C = 300\text{mA}$	800		3200	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = 300\text{mA}$ , $I_B = 3.0\text{mA}$		0.16	0.3	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	$I_C = 300\text{mA}$ , $I_B = 3.0\text{mA}$		0.75	1.2	V
Gain bandwidth product	$f_T$	$V_{CE} = 5.0\text{V}$ , $I_E = -300\text{mA}$	150	250		MHz
Output capacitance	$C_{ob}$	$V_{CB} = 10\text{V}$ , $I_E = 0$ , $f = 1.0\text{MHz}$		10		pF

\*.  $PW \leq 350\mu\text{s}$ , duty cycle  $\leq 2\%$

■  $h_{FE}$  Classification

Marking	UM	UL	UK
$h_{FE}$	800~1600	1200~2400	2000~3200