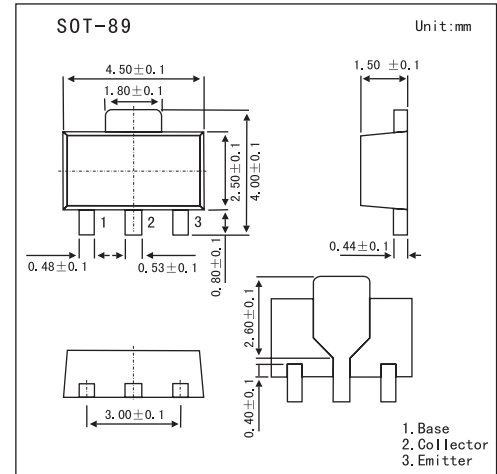


## Power Transistor

## 2SD1898

## ■ Features

- High  $V_{CE0}$ ,  $V_{CE0}=80V$  .
- High  $I_c$ ,  $I_c=1A$  (DC) .
- Good  $h_{FE}$  linearity .
- Low  $V_{CE(sat)}$  .

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	120	V
Collector-emitter voltage	$V_{CE0}$	80	V
Emitter-base voltage	$V_{EB0}$	5	V
Collector current	$I_c$	1	A
	$I_c$ (Pulse) *1	2	A
Collector power dissipation	$P_C$	0.5	W
	$P_C$ *2	2	W
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

\*1.  $P_w=20ms$ .

\*2. 40X40X0.7mm Ceramic board.

■ Electrical Characteristics  $T_a = 25^\circ C$ 

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base voltage	$BV_{CB0}$	$I_c=50\mu A$	120			V
Collector-emitter voltage	$BV_{CE0}$	$I_c=1mA$	80			V
Emitter-base voltage	$BV_{EB0}$	$I_E=50\mu A$	5			V
Collector cutoff current	$I_{CB0}$	$V_{CB}=100V$			1	$\mu A$
Emitter cutoff current	$I_{EB0}$	$V_{EB}=4V$			1	$\mu A$
Forward current transfer ratio	$h_{FE}$	$V_{CE}=3V, I_c=0.5A$	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=500mA, I_b=20mA$		0.15	0.4	V
Transition frequency	$f_T$	$V_{CE}=10V, I_E=-50mA, f=100MHz$		100		MHz
Output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0A, f=1MHz$		20		pF

■  $h_{FE}$  Classification

Marking	DF		
	P	Q	R
$h_{FE}$	82~180	120~270	180~390