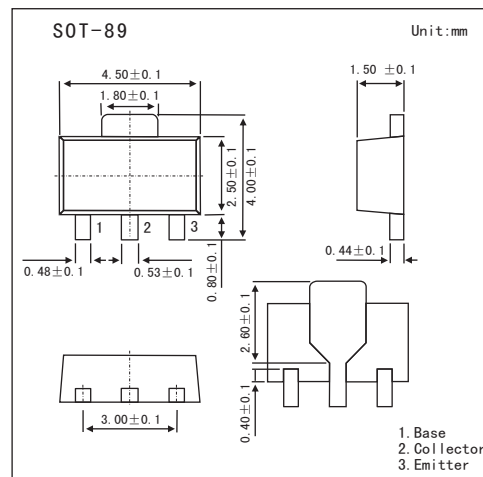


Epitaxial Planar NPN Transistor

KTD1898

Features

Collector Power Dissipation: $P_c=500\text{mW}$ Collector Current: $I_c=1\text{A}$ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	100	V
Collector-Emitter voltage	V_{CE0}	80	V
Emitter-base voltage	V_{EB0}	5	V
Collector Current	I_c	1	A
Collector Power Dissipation	P_c	500	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_c=1\text{mA}$, $I_B=0$	80			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=80\text{V}$, $I_E=0$			1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=4\text{V}$, $I_c=0$			1	μA
DC Current Gain	h_{FE}	$V_{CE}=3\text{V}$, $I_c=500\text{mA}$	70		400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c=500\text{mA}$, $I_B=20\text{mA}$			0.4	V
Transition frequency	f_T	$V_{CE}=10\text{V}$, $I_c=10\text{mA}$		100		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		20		pF

hFE Classification

Marking	ZO	ZR	ZGR
Rank	O	R	GR
hFE	70 140	120 240	200 400