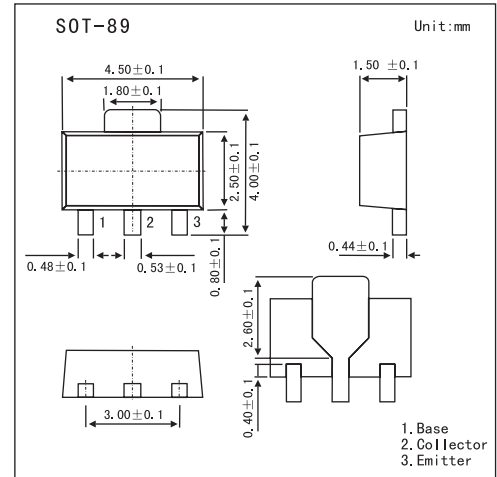


Small Signal Transistor

2SC3728

■ Features

- High $h_{FE}=150$ to 800.
- High collector current ($I_C=2A$).
- High collector dissipation $P_C=500mW$.
- Low $V_{CE(sat)}$: $V_{CE(sat)}=0.17V$ typ(@ $I_C=1A, I_B=50mA$).
- Small package for mounting.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	20	V
Emitter-base voltage	V_{EB0}	6	V
Collector-emitter voltage	V_{CE0}	12	V
Peak collector current	I_{CM}	3	A
Collector current	I_C	2	A
Collector dissipation ($T_a=25^\circ C$)	P_C	500	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CB0}$	$I_C=10\mu A, I_E=0$	20			V
Emitter-base breakdown voltage	$V_{(BR)EB0}$	$I_E=10\mu A, I_C=0$	6			V
Collector-emitter breakdown voltage	$V_{(BR)CE0}$	$I_C=5mA, R_{BE}=\infty$	12	14	16	V
Collector cutoff current	I_{CBO}	$V_{CB}=16V, I_E=0$			0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=4V, I_C=100mA$	150	350	800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1A, I_B=50mA$		0.2	0.35	V
Gain bandwidth product	f_T	$V_{CE}=2V, I_E=-10mA$	40	80		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		28		pF

■ h_{FE} Classification

Marking	YE	YF	YG
h_{FE}	150~300	250~500	400~800