



ShenzhenTaimaoTechnology Co.,Ltd.

TO-92 Plastic-Encapsulate Transistors

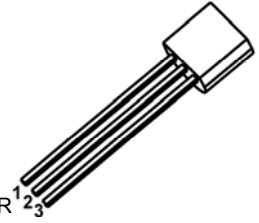
2N5087 TRANSISTOR (PNP)

FEATURES

- General Purpose Amplifier Transistor

TO - 92

1. EMITTER
2. BASE
3. COLLECTOR



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-3	V
I_C	Collector Current	-50	mA
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	$^{\circ}\text{C/W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-0.1\text{mA}, I_E=0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-0.01\text{mA}, I_C=0$	-3			V
Collector cut-off current	I_{CBO}	$V_{CB}=-35\text{V}, I_E=0$			-50	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-3\text{V}, I_C=0$			-50	nA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=-5\text{V}, I_C=-0.1\text{mA}$	250		800	
	$h_{FE(2)}^*$	$V_{CE}=-5\text{V}, I_C=-1\text{mA}$	250			
	$h_{FE(3)}^*$	$V_{CE}=-5\text{V}, I_C=-10\text{mA}$	250			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=-10\text{mA}, I_B=-1\text{mA}$			-0.3	V
Base-emitter voltage	V_{BE}^*	$V_{CE}=-5\text{V}, I_C=-10\text{mA}$			-0.85	V
Collector output capacitance	C_{ob}	$V_{CB}=-5\text{V}, I_E=0, f=1\text{MHz}$			4	pF
Transition frequency	f_T	$V_{CE}=-5\text{V}, I_C=-0.5\text{mA}, f=100\text{MHz}$	40			MHz

*Pulse test: pulse width $\leq 380\mu\text{s}$, duty cycles $\leq 2.0\%$.