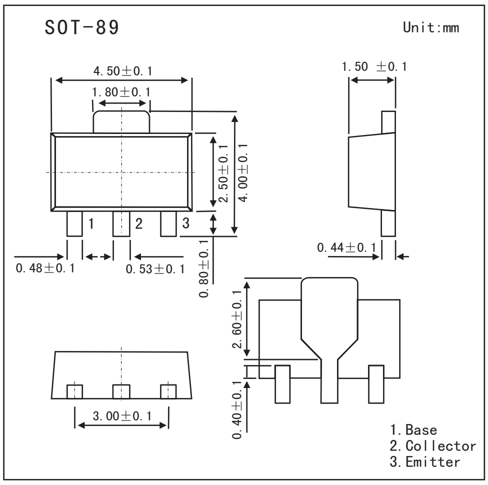
Epitaxial Planar NPN Transistor

KTC3205



Features

Collector Power Dissipation: P_C=500mW

Collector Current: I_C=2A

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	30	V
Collector-Emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	5	V
Collector Current	I_C	2	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 1mA, I_E=0	30			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	30			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=1mA, I_C=0	5			V
Collector Cut-off Current	I_{CBO}	V_{CB}=30V, I_E=0			100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0			100	nA
DC Current Gain	h_{FE}	V_{CE}=2V, I_C=500mA	100		320	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=1.5A, I_B=0.03A			2.0	V
Base-Emitter Voltage	V_{BE}	V_{CE}=2V, I_C=500mA			1.0	V
Transition frequency	f_T	V_{CE}=2V, I_C=500mA		120		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz		13		pF

h_{FE} Classification

Rank	O	Y
Range	100 200	160 320