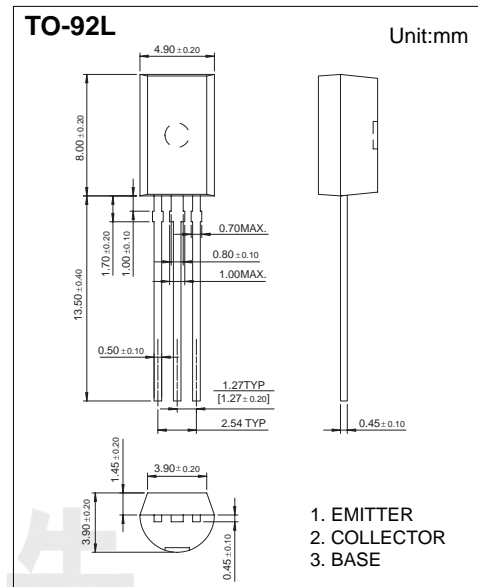


# Transistor

## NPN Transistors 2SC2328A

### ■ Features

- Collector Dissipation  $P_c=625\text{mW}$
- 3W Output Application
- Complementary to 2SA928A



### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	30	V
Collector - Emitter Voltage	$V_{CEO}$	30	
Emitter - Base Voltage	$V_{EBO}$	5	
Collector Current - Continuous	$I_c$	2	A
Collector Power Dissipation	$P_c$	625	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to 150	

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_c = 100 \mu\text{A}, I_E = 0$	30			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_c = 10 \text{ mA}, I_B = 0$	30			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = 1 \text{ mA}, I_C = 0$	5			
Collector cut-off current	$I_{CBO}$	$V_{CB} = 30 \text{ V}, I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5 \text{ V}, I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1.5 \text{ A}, I_B = 30 \text{ mA}$			2	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 1.5 \text{ A}, I_B = 30 \text{ mA}$			1.5	
Base-emitter on voltage	$V_{BE(on)}$	$V_{CE} = 2 \text{ V}, I_C = 500 \text{ mA}$			1	
DC current gain	$h_{FE}$	$V_{CE} = 2 \text{ V}, I_C = 500 \text{ mA}$	100		320	
Output capacitance	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		30		pF
Transition frequency	$f_T$	$V_{CE} = 2 \text{ V}, I_C = 500 \text{ mA}$		120		MHz

### ■ Classification of $h_{FE}$

Rank	O	Y
Range	100-200	160-320