

## FEATURES

Power dissipation

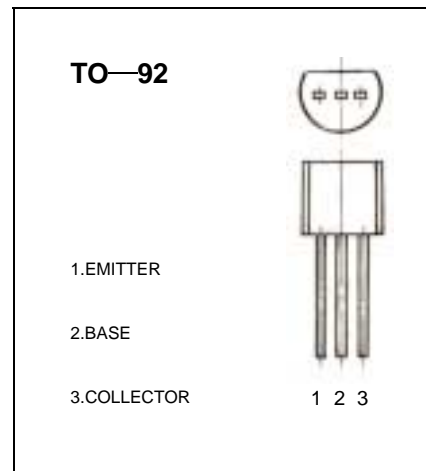
$$P_{CM} : 0.625 \text{ W (Tamb=25}^{\circ}\text{C)}$$

Collector current

$$I_{CM} : -0.5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -40 \text{ V}$$



## ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100 \mu\text{A}, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -0.1 \text{ mA}, I_B = 0$	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100 \mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -40 \text{ V}, I_E = 0$			-0.1	$\mu\text{A}$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -20 \text{ V}, I_B = 0$			-0.2	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 \text{ V}, I_C = 0$			-0.1	$\mu\text{A}$
DC current gain(note)	$H_{FE(1)}$	$V_{CE} = -1 \text{ V}, I_C = -50 \text{ mA}$	64		300	
	$H_{FE(2)}$	$V_{CE} = -1 \text{ V}, I_C = -500 \text{ mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$			-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$			-1.2	V
Base-emitter voltage	$V_{EB}$	$I_E = -100 \text{ mA}$			-1.4	V
Transition frequency	$f_T$	$V_{CE} = -6 \text{ V}, I_C = -20 \text{ mA}$ $f = 30 \text{ MHz}$	150			MHz

## CLASSIFICATION OF $H_{FE(1)}$

Rank	D	E	F	G	H	I
Range	64-91	78-112	96-135	112-166	144-202	190-300