

TO-92 Plastic-Encapsulated Transistors

2SA1625 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 750 \text{ mW (Tamb=25°C)}$$

Collector current

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

Collector-base voltage

$$V_{(BR)CBO} : -400 \text{ V}$$

Operating and storage junction temperature range

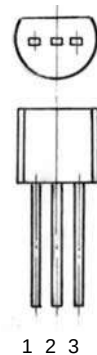
$$T_J, T_{stg} : -55^\circ\text{C to } +150^\circ\text{C}$$

TO-92

1. EMITTER

2. COLLECTOR

3. BASE



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-7			V
Collector cut-off current	I_{CBO}	$V_{CB} = -400\text{V}, I_E = 0$			-1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -5\text{V}, I_C = -50\text{mA}$	40		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$			-1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$			-1.2	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$		10		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$	20	40		pF
Turn-on Time	t_{on}	$V_{CC} = -150\text{V}, I_C = -100\text{mA}, I_{B1} = I_{B2} = 10\text{mA}, R_L = 1.5\text{k}\Omega$		1		μs
Storage Time	t_{stg}			5		μs
Fall-Time	t_f			1		μs

CLASSIFICATION OF $h_{FE(1)}$

Rank	M	L	K
Range	40-80	60-120	100-200