

### 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

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

#### TO-92

1. EMITTER

2. COLLECTOR

3. BASE

1 2 3

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

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

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

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