



## TO-252-2L Plastic-Encapsulate Transistors

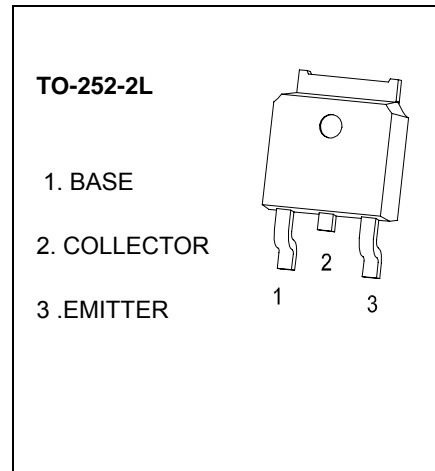
### 2SA1225 TRANSISTOR (PNP)

#### FEATURES

- High Transition Frequency
- Complementary to 2SC2983

#### APPLICATIONS

- Power Amplifier Applications
- Driver Stage Amplifier Applications



#### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-160	V
$V_{CEO}$	Collector-Emitter Voltage	-160	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-1.5	A
$P_C$	Collector Power Dissipation	1	W
$T_j$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-1\text{mA}, I_E=0$	-160			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=-10\text{mA}, I_B=0$	-160			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-1\text{mA}, I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=160\text{V}, I_E=0$			-0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=-5\text{V}, I_C=-0.1\text{A}$	70		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-0.5\text{A}, I_B=-50\text{mA}$			-1.5	V
Base-emitter voltage	$V_{BE}$	$V_{CE}=-5\text{V}, I_C=-0.5\text{A}$			-1	V
Transition frequency	$f_T$	$V_{CE}=-10\text{V}, I_C=-100\text{mA}$		100		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		30		pF

\* Pulse test

#### CLASSIFICATION OF $h_{FE}$

Rank	O	Y
Range	70-140	120-240