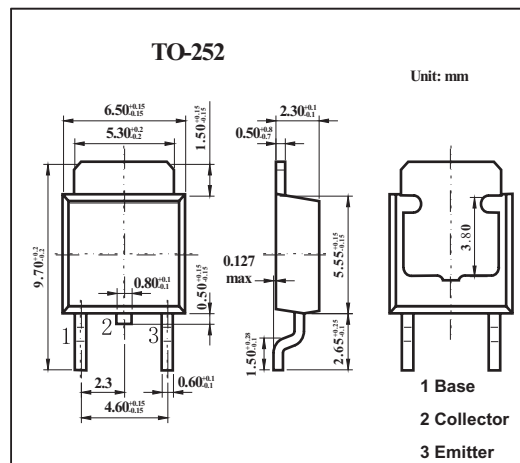


# 2SD1220

■ Features

- Power Amplifier Applications



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	150	V
Collector-emitter voltage	$V_{CEO}$	150	V
Emitter-base voltage	$V_{EBO}$	6	V
Collector current	$I_C$	1.5	A
Base current	$I_B$	1	A
Collector power dissipation $T_a = 25^\circ\text{C}$ $T_c = 25^\circ\text{C}$	$P_C$	1 10	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 150\text{ V}, I_E = 0$			1.0	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 6\text{ V}, I_C = 0$			1.0	$\mu\text{A}$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{ mA}, I_B = 0$	150			V
DC current gain	$h_{FE}$	$V_{CE} = 5\text{ V}, I_C = 200\text{ mA}$	60		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\text{ mA}, I_B = 50\text{ mA}$			1.5	V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 5\text{ V}, I_C = 5\text{ mA}$	0.5		0.8	V
Transition frequency	$f_T$	$V_{CE} = 5\text{ V}, I_C = 200\text{ mA}$	20	100		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$		13	20	pF

■  $h_{FE}$  Classification

Marking	D1220		
Rank	R	O	Y
$h_{FE}$	60 to 120	100 to 200	160 to 320