

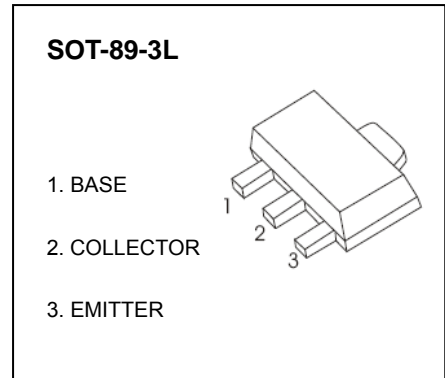


SOT-89-3L Plastic-Encapsulate Transistors

2SA1204 TRANSISTOR (PNP)

FEATURES

- Complementary to 2SC2884
- Small Flat Package
- Audio Frequency Amplifier Application
- High DC Current Gain



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

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-0.8	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C}/\text{W}$
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	$V_{(BR)CBO}$	$I_C = -0.1\text{mA}, I_E = 0$	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.1\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -35\text{V}, I_E = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	100		320	
	$h_{FE(2)}$	$V_{CE} = -1\text{V}, I_C = -700\text{mA}$	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -20\text{mA}$			-0.7	V
Base-emitter voltage	V_{BE}	$V_{CE} = -1\text{V}, I_C = -10\text{mA}$	-0.5		-0.8	V
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		19		pF
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$		120		MHz

CLASSIFICATION OF $h_{FE(1)}$

RANK	O	Y
RANGE	100 - 200	160 - 320
MARKING	RO	RY