



TO-126C Plastic-Encapsulate Transistors

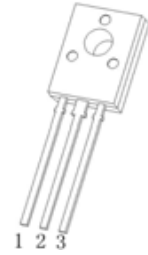
2SA1357 TRANSISTOR (PNP)

FEATURES

- High Collector Current
- Strobe Flash Applications
- Audio Power Amplifier Applications

TO - 126C

1. EMITTER
2. COLLECTOR
3. BASE



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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-35	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-8	V
I_C	Collector Current	-5	A
P_C	Collector Power Dissipation	1.5	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	83	$^{\circ}\text{C/W}$
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	$V_{(BR)CBO}$	$I_C = -1\text{mA}, I_E = 0$	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{mA}, I_C = 0$	-8			V
Collector cut-off current	I_{CBO}	$V_{CB} = -35\text{V}, I_E = 0$			-100	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -8\text{V}, I_C = 0$			-100	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -2\text{V}, I_C = -0.5\text{A}$	100		320	
	$h_{FE(2)}$	$V_{CE} = -2\text{V}, I_C = -4\text{A}$	70			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -4\text{A}, I_B = -0.1\text{A}$			-1	V
Base-emitter voltage	V_{BE}	$V_{CE} = -2\text{V}, I_C = -4\text{A}$			-1.5	V
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		62		pF
Transition frequency	f_T	$V_{CE} = -2\text{V}, I_C = -0.5\text{A}$		170		MHz

CLASSIFICATION OF $h_{FE(1)}$

RANK	O	Y
RANGE	100-200	160-320

Typical Characteristics

2SA1357

