

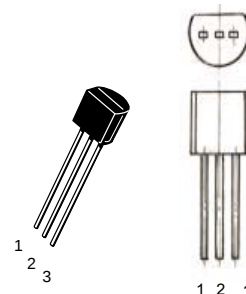
FEATURES

- Low noise
- Excellent h_{FE} linearity
- Complementary to A733T

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

Parameter	Symbol	Value	Units
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current Continuous	I_C	150	mA
Collector Power Dissipation	P_C	400	mW
Junction, Storage Temperature	T_J, T_{STG}	125, -55~125	$^\circ\text{C}$

TO-92



1. EMITTER
2. COLLECTOR
3. BASE

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 1\text{mA}, I_E = 0$	60			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 100\mu\text{A}, I_B = 0$	50			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100\text{mA}, I_C = 0$	5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 60\text{V}, I_E = 0$			0.1	μA
Collector Cut-off Current	I_{CEO}	$V_{CE} = 45\text{V}$			0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 6\text{V}, I_C = 1\text{mA}$	70		700	
	$h_{FE(2)}$	$V_{CE} = 6\text{V}, I_C = 0.1\text{mA}$	40			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100\text{mA}, I_B = 10\text{mA}$			0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 100\text{mA}, I_B = 10\text{mA}$			1	V
Collector Power Dissipation	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$			3.0	pF
Transition Frequency	f_T	$V_{CE}=6\text{V}, I_C=10\text{mA}, f=30\text{MHz}$	200			MHz
Noise Figure	NF	$V_{CE}=6\text{V}, I_C=0.1\text{mA}, R_G=10\text{K}\Omega, f=\text{kHz}$			10	dB

CLASSIFICATION OF h_{FE}

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700

TYPICAL CHARACTERISTICS

