



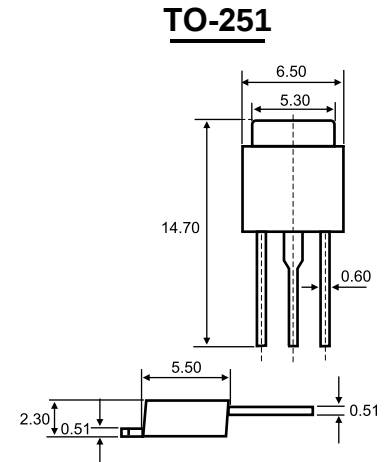
1. EMITTER
2. COLLECTOR
3. BASE

Features

- ✧ Power dissipation

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Power Dissipation	1.25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55-150	$^\circ\text{C}$



Dimensions in inches and (millimeters)

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C = 100\mu\text{A}$, $I_E=0$	40			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C = 10\text{mA}$, $I_B=0$	30			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E = 100\mu\text{A}$, $I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}= 40\text{ V}$, $I_E=0$			1	μA
Collector cut-off current	I_{CEO}	$V_{CE}= 30\text{ V}$, $I_B=0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}= 6\text{ V}$, $I_C=0$			1	μA
DC current gain	h_{FE}	$V_{CE}= 2\text{ V}$, $I_C= 1\text{ A}$	60		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C= 2\text{ A}$, $I_B= 0.2\text{ A}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C= 2\text{ A}$, $I_B= 0.2\text{ A}$			1.5	V
Transition frequency	f_T	$V_{CE}= 5\text{ V}$, $I_C=0.1\text{ A}$ $f=10\text{MHz}$		90		MHz

CLASSIFICATION OF h_{FE}

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

Typical Characteristics

