

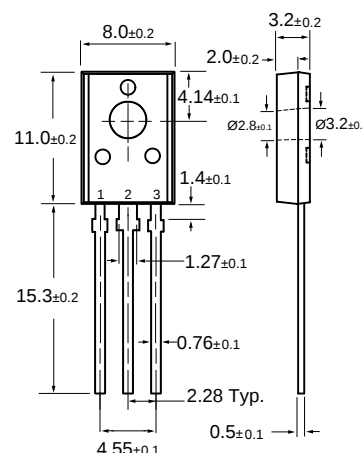
TO-126

RoHS
COMPLIANT

Pb
Pb-Free

FEATURES

- Power dissipation



1: Emitter
2: Collector
3: Base

Dimensions in Millimeters

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	3	A
P_D	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	°C /W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu\text{A}, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{mA}, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu\text{A}, I_C=0$	6			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	$V_{CE}= 5\text{V}, I_C=0.1\text{A}$ $f=10\text{MHz}$	50	80		MHz

CLASSIFICATION OF h_{FE}

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

Typical Characteristics

