

BD438

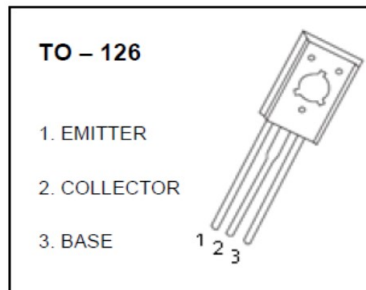
FEATURES

- Complement to BD437
- Package:TO-126

ABSOLUTE MAXIMUM RATINGS

(Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Units
Collector-Base Voltage	V_{CBO}	-45	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-4	A
Collector Peak Current	I_{CM}	-7	A
Base Current	I_B	-1	A
Collector Dissipation	P_C	1.25	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	- 55 ~ 150	°C



ELECTRICAL CHARACTERISTICS

(Ta = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	$I_C=-0.1mA, I_E=0$	-45		V
Collector-emitter sustaining voltage	$V_{CEO(SUS)}$	$I_C=-100mA, I_B=0$	-45		V
Emitter-base breakdown voltage	BV_{EBO}	$I_E=-0.1mA, I_C=0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB}=-45V, I_E=0$		-0.1	mA
Collector cut-off current	I_{CES}	$V_{CB}=-45V, V_{BE}=0$		-0.1	mA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$		-1	mA
DC current gain	H_{FE1}	$V_{CE}=-1V, I_C=-500mA$	85	140	
	H_{FE2}	$V_{CE}=-5V, I_C=-10mA$	30		
	H_{FE3}	$V_{CE}=-1V, I_C=-2A$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-2A, I_B=-200mA$		-0.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=-1V, I_C=-2A$		-1.1	V
Current Gain Bandwidth Product	f_T	$V_{CE}=-1V, I_C=-250mA$	3		MHz