

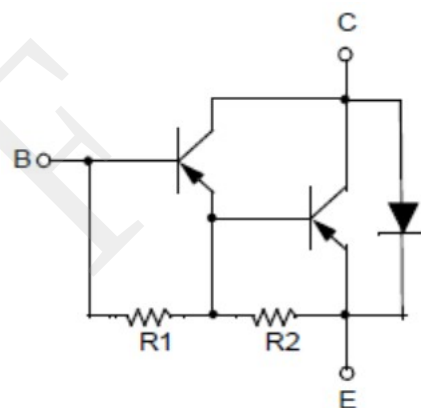
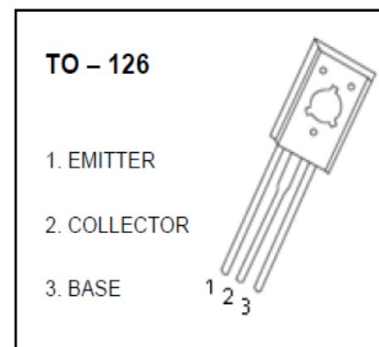
BD678/BD678A

FEATURES

- High DC Current Gain
- Complementary to BD677/BD677A
- Package:TO-126

Maximum Ratings (Ta = 25°, unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-60	V
Collector-emitter voltage	V_{CEO}	-60	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-4	A
Base Current	I_B	-100	mA
Collector Power Dissipation ($T_C = 25^\circ$)	P_C	40	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-60~+150	$^\circ\text{C}$



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -1\text{mA}, I_E = 0$	-60			V
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C = -50\text{mA}, I_B = 0$	-60			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_B = -2\text{mA}, I_C = 0$	-5			V
collector-base cut-off current	I_{CBO}	$V_{CB} = -60\text{V}, I_E = 0$			-0.2	mA
collector-emitter cut-off current	I_{CEO}	$V_{CE} = -30\text{V}, I_B = 0$			-0.5	mA
emitter-base cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-2	mA
DC current gain	BD678	H_{FE}	$V_{CE} = -3\text{V}, I_C = -1.5\text{A}$	750		
	BD678A					
collector-emitter saturation voltage	BD678	$V_{CE(SAT)1}$	$I_C = -1.5\text{A}, I_B = -30\text{mA}$		-2.5	V
	BD678A					
Base-Emitter On Voltage	BD678	$V_{BE(on)}$	$V_{CE} = -3\text{V}, I_C = -1.5\text{A}$		-2.5	V
	BD678A					