

BD680

Silicon PNP Transistors



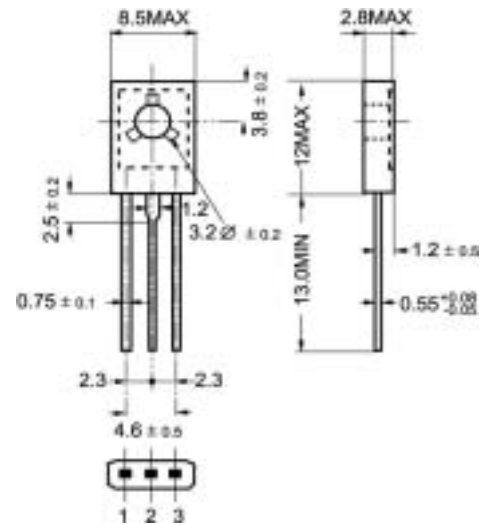
ECB

◆ Features

- With TO-126 package
- In monolithic Darlington configuration
- This transistor is intended for use in medium power linear and switching applications
- Complement to type BD679

◆ Absolute Maximum Ratings $T_c=25^\circ\text{C}$

SYMBOL	PARAMETER	RATING	UNIT
V_{CBO}	Collector to base voltage	80	V
V_{CEO}	Collector to emitter voltage	80	V
V_{CER}	Emitter to base voltage		
V_{EB}	Emitter to base voltage	5	V
I_B	Base Current		
I_C	Collector current-Continuous	4	A
P_D	Total Power Dissipation@ $T_C=25^\circ\text{C}$	40	W
T_j	Junction temperature	150	$^\circ\text{C}$
T_{stg}	Storage temperature	-55~150	$^\circ\text{C}$



TO-126

◆ Electrical Characteristics $T_c=25^\circ\text{C}$

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=50\text{mA}; I_B=0$	80		V
V_{CBO}	Collector-Base Voltage				
I_{CEO}	Collector Cutoff Current	$V_{CE}=40\text{V}; I_B=0$		500	μA
I_{CBO}	Collector Cutoff Current	$V_{CB}=80\text{V}; I_E=0$		200	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$		2	mA
V_{EBO}	Emitter Cutoff Voltage				
$V_{CE(sat-1)}$	Collector-emitter saturation voltages	$I_C=1.5\text{A}; I_B=30\text{mA}$		2.5	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltages				
$V_{CE(sat-3)}$	Collector-emitter saturation voltages				
h_{FE-1}	Forward current transfer ratio	$I_C=1.5\text{A}; V_{CE}=3\text{V}$	750		
h_{FE-2}	Forward current transfer ratio				
$V_{BE(sat-1)}$	Base-Emitter Saturation Voltage				
$V_{BE(sat-2)}$	Base-Emitter Saturation Voltage				
f_T	Current Gain-Bandwidth Product				