

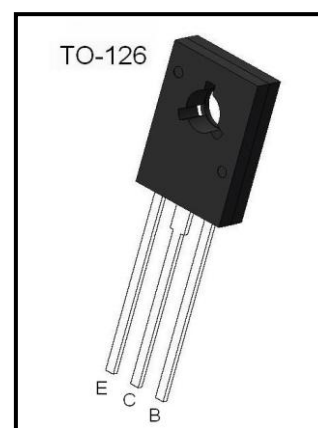
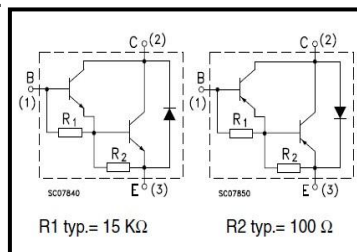
APPLICATION

Linear and switching industrial equipment.

DESCRIPTION

The BD675,BD675A,BD677, BD677A, BD679, BD679A and BD681 are silicon epitaxial-base NPN power transistors in monolithic Darlington configuration mounted in TO-126 plastic package.They are intended for use in medium power linarand switching applications.

The complementary PNP types are BD676,BD676A,BD678,BD678A, BD680, BD680A and BD682 respectively.

**Absolute Maximum Ratings (Ta=25°C)**

Symbol	Parameter	Value					Unit
		NPN	BD675/A	BD677/A	BD679/A	BD681	
		PNP	BD676/A	BD678/A	BD680/A	BD682	
BV _{CBO}	Collector-Base Voltage		45	60	80	100	V
BV _{CEO}	Collector-Emitter Voltage		45	60	80	100	V
BV _{EBO}	Emitter-Base Voltage		5				V
I _{CM}	Collector Current		4				A
P _D	Collector Power Dissipation		40				W
T _j , T _{stg}	Junction Temperature Storage Temperature		- 55 ~ +150				°C

Electrical Characteristics (Ta=25°C)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I _{CBO}	Collector Cut-off Current (I _E = 0)	V _{CE} = rated V _{CBO} V _{CE} = rated V _{CBO} T _C = 100 °C			0.2 2	mA
I _{CEO}	Collector Cut-off Current (I _B = 0)	V _{CE} = half rated V _{CEO}			0.5	mA
I _{EBO}	Emitter Cut-off Current(I _C = 0)	V _{EB} = 5 V			2	mA
BV _{CEO}	Collector-Emitter Sustaining Voltage	I _C = 50 mA for BD675/675A/676/676A for BD677/677A/678/678A for BD679/679A/680/680A for BD681/682	45 60 80 100			V
BV _{CBO}	Collector-Emitter Sustaining Voltage	I _C = 1 mA for BD675/675A/676/676A for BD677/677A/678/678A for BD679/679A/680/680A for BD681/682	45 60 80 100			V
H _{FE} *	DC Current Gain	for BD675/677/678/679/680/681/682 I _C = 1.5 A V _{CE} = 3 V for BD675A/677A/678A/679A/680A I _C = 2 A V _{CE} = 3 V	750 750			
V _{CESAT} *	Collector-Emitter Saturation Voltage	for BD677/678/679/680/681/682 I _C = 1.5 A I _B = 30 mA for BD677A/678A/679A/680A I _C = 2 A I _B = 40 mA			2.5 2.8	V
V _{BE} *	Base-Emitter Voltage	for BD675/677/678/679/680/681/682 I _C = 1.5 A V _{CE} = 3 V for BD675A/677A/678A/679A/680A I _C = 2 A V _{CE} = 3 V			2.5 2.5	V

* Pulsed: Pulse duration = 300 μ s, duty cycle 1.5 %