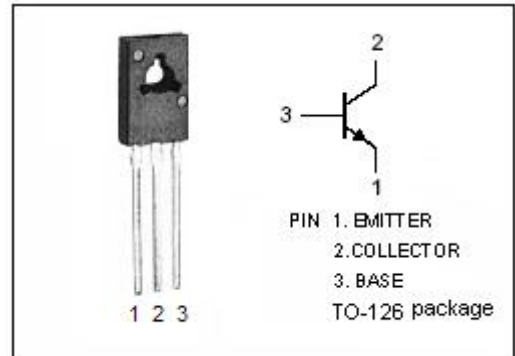


isc Silicon NPN Power Transistor
HLB123D
DESCRIPTION

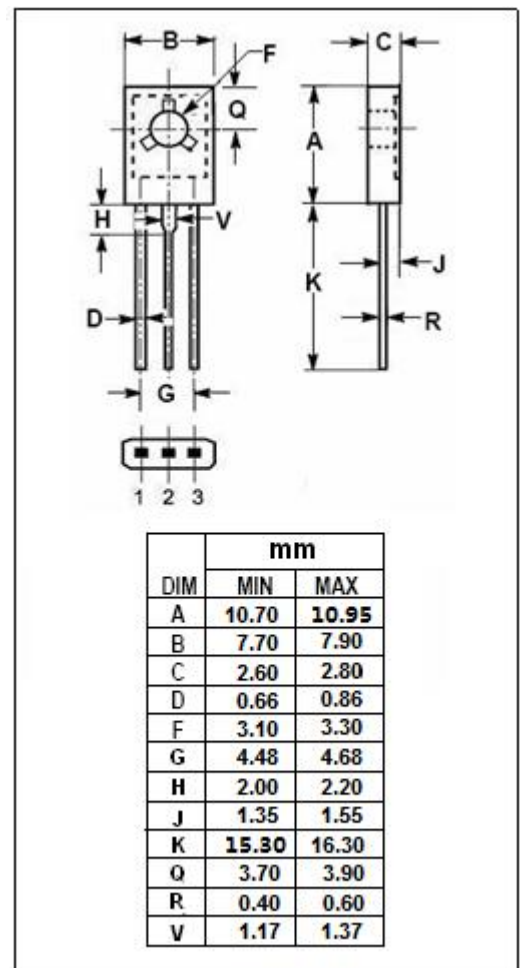
- High voltage
- High speed switching
- Low Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- The HLB123D is designed for high voltage, high speed switching inductive circuits and amplifier applications


ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	600	V
V _{CER}	Collector-Emitter Voltage R _{BE} =150 Ω	600	V
V _{CEO}	Collector-Emitter Voltage	400	V
V _{EBO}	Emitter-Base Voltage	8	V
I _C	Collector Current-Continuous	1	A
P _C	Collector Power Dissipation @ T _c =25°C	30	W
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



isc Silicon NPN Power Transistor
HLB123D
ELECTRICAL CHARACTERISTICS

 T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C =100mA; I _B = 10mA			0.8	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C =300mA; I _B = 30mA			0.9	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _C =100mA; I _B = 10mA			1.2	V
V _{BE(sat)-2}	Base-Emitter Saturation Voltage	I _C =300mA; I _B = 30mA			1.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 600V ; I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 9V; I _C = 0			10	μ A
h _{FE-1}	DC Current Gain	I _C = 300mA ; V _{CE} = 5V	10		50	
h _{FE-2}	DC Current Gain	I _C = 500mA ; V _{CE} = 5V	10			
h _{FE-3}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	6			

◆ h_{FE-1} Classifications

B1	B2	B3	B4	B5	B6	B7	B8
10-17	12-22	18-27	23-32	28-37	33-42	38-47	43-50

Notice:

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