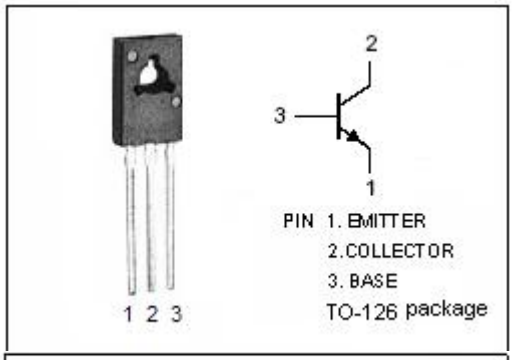
isc Silicon NPN Power Transistor — 2SC3177

DESCRIPTION

- With TO-126 packaging
- Low collector-to-emitter saturation voltage
- Fast switching speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

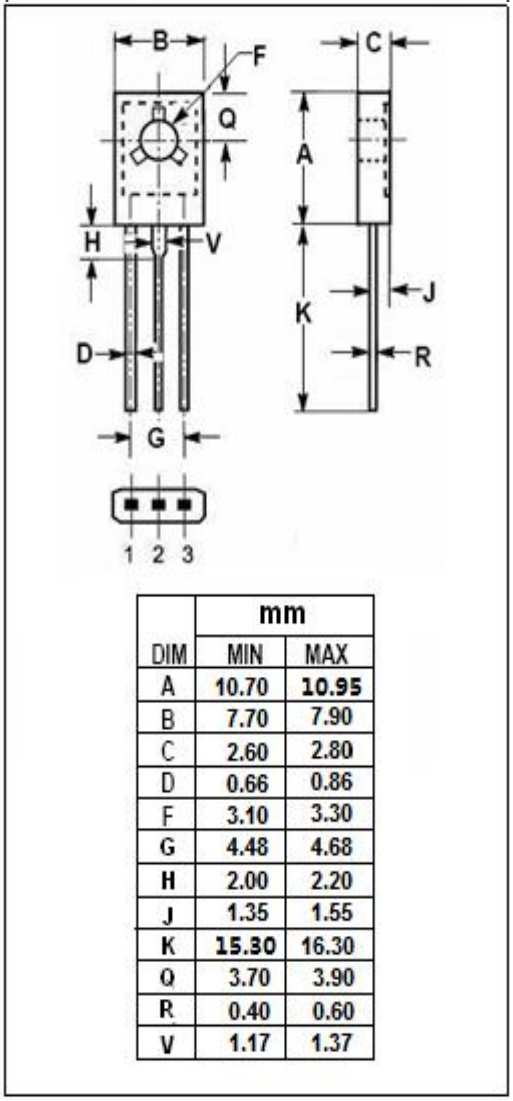


APPLICATIONS

- Relay drivers
- High-speed inverters
- Converters
- Switching applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	15	V
V_{CEO}	Collector-Emitter Voltage	15	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current-Continuous	50	mA
P_C	Collector Power Dissipation	250	mW
T_J	Junction Temperature	125	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	10.70	10.95
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	15.30	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CBO}	Collector-Base Voltage	I_C=0.1mA, I_E=0	15			V
V_{CEO}	Collector-Emitter Voltage	I_C=1mA, I_B=0	15			V
V_{EBO}	Emitter-Base Voltage	I_E=0.1mA, I_C=0	3			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 5mA; I_B=0.5mA			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 5mA; I_B=0.5mA			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 10V; I_E= 0			1.0	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 3V; I_C= 0			1.0	μA
h_{FE}	DC Current Gain	I_C= 5mA ; V_{CE}= 4V	200			