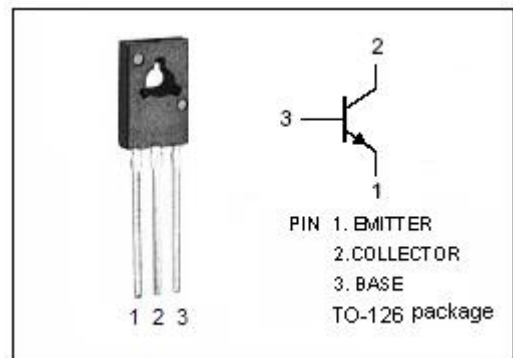


isc Silicon NPN Power Transistor
2SC1846
DESCRIPTION

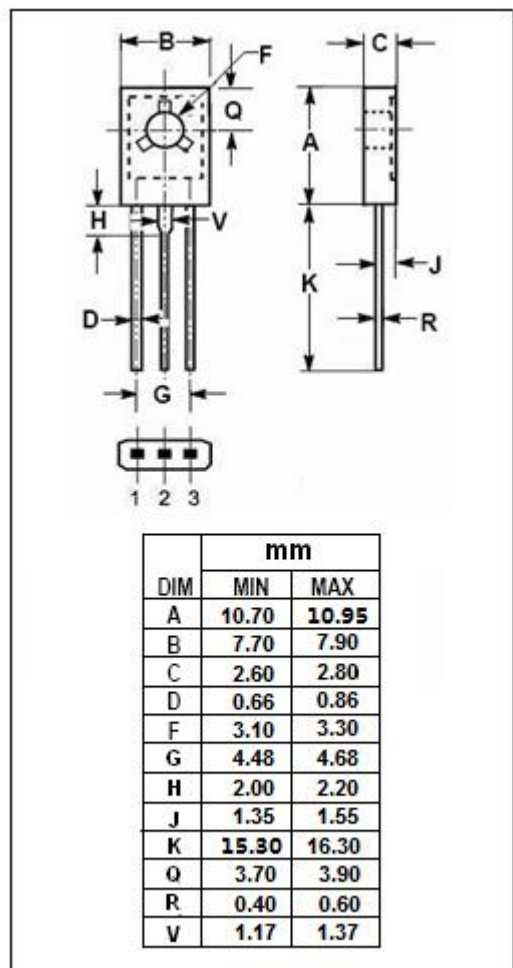
- Silicon NPN epitaxial planar type
- Low collector to emitter saturation voltage
- Output of 3W can be obtained by a complementary with 2SA0885
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Suited for medium output power amplifier


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	45	V
V _{CE0}	Collector-Emitter Voltage	35	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current-Continuous	1.5	A
I _{CP}	Collector Current-Pulse	3.0	A
P _C	Collector Power Dissipation @ T _a =25°C	1.2 ¹	W
	Collector Power Dissipation @ T _c =25°C	5 ²	
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



isc Silicon NPN Power Transistor

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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 500mA; I _B = 50mA			0.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 500mA; I _B = 50mA			1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 20V; I _E = 0			1.0	μ A
I _{CEO}	Collector Emitter Current	V _{CB} = 10V; I _E = 0			100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			10	μ A
h _{FE}	DC Current Gain	I _C = 1A; V _{CE} = 5V	50			
f _T	Current-Gain—Bandwidth Product	I _C = 50mA; V _{CE} = 10V		200		MHz
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = 10V, f _{test} = 1MHz		20		pF

◆ h_{FE} Classifications

Q	R	S
85-170	120-240	170-340

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