

isc Silicon NPN Power Transistor
2SC3419
DESCRIPTION

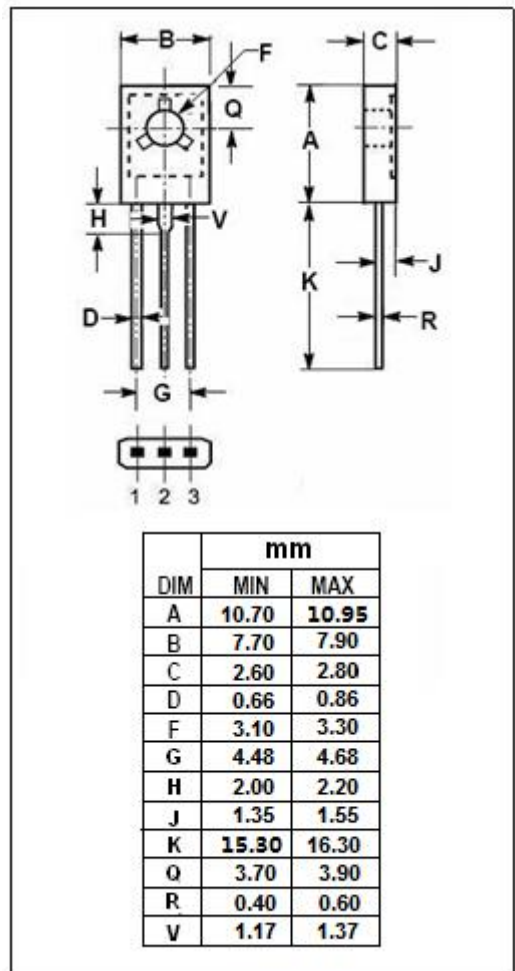
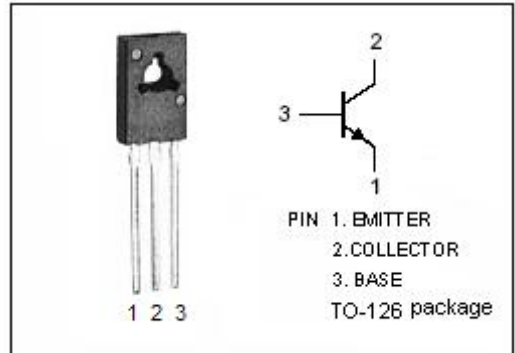
- Low Collector Saturation Voltage
- High power dissipation
- Complementary to 2SA1356
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Medium power amplifier applications

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	40	V
V _{CEO}	Collector-Emitter Voltage	40	V
V _{EBO}	Emitter-Base Voltage	5	V
I _c	Collector Current-Continuous	0.8	A
P _c	Collector Power Dissipation @ T _c =25°C	5.0	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CBO}	Collector-Base breakdown voltage	I _C =1mA ; I _B =0	40			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =10mA ; I _B =0	40			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =1mA ; I _C =0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C =500mA ; I _B = 50mA			0.8	V
V _{BE(ON)}	Base-Emitter On Voltage	I _C = 500mA ; V _{CE} = 2V			1.1	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 40V ; I _E = 0			1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V ; I _C = 0			1.0	μ A
h _{FE-1}	DC Current Gain	I _C = 50mA ; V _{CE} = 2V	70		240	
h _{FE-2}	DC Current Gain	I _C = 800mA ; V _{CE} = 2V	13			
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V ; f= 1MHz		10		pF
f _T	Current-Gain—Bandwidth Product	I _E = -500mA ; V _{CE} = 2V	50	100		MHz

◆ h_{FE-1} Classifications

O	Y
70-140	120-240

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