

isc Silicon PNP Power Transistor
2SA1186
DESCRIPTION

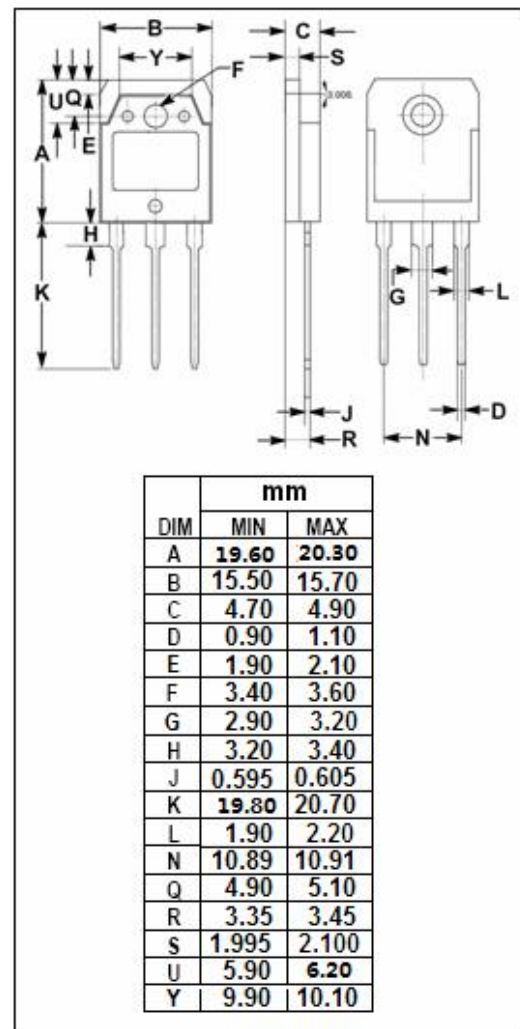
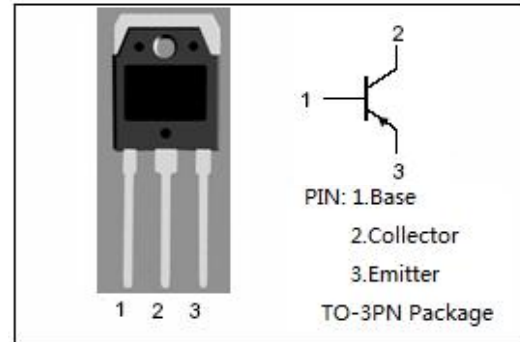
- High Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = -150V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SC2837
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For audio and general purpose applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-150	V
V_{CEO}	Collector-Emitter Voltage	-150	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_B	Base Current-Continuous	-2	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	100	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Voltage Breakdown	I _C = -25mA; I _B = 0	-150			V
V _{CE(sat)}	Collector-Emitter Voltage Saturation	I _C = -5.0A; I _B = -0.5A			-2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -150V; I _E =0			-100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C =0			-100	μ A
h _{FE}	DC Current Gain	I _C = -3A; V _{CE} = -4V	50		180	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -80V; f= 1.0MHz		110		pF
f _T	Current-Gain—Bandwidth Product	I _E = 1A; V _{CE} = -12V		60		MHz

Switching times

t _{on}	Turn-on Time	I _C = -5A, R _L = 12Ω, I _{B1} = -I _{B2} = -0.5A, V _{CC} = -60V		0.25		μ s
t _{stg}	Storage Time			0.8		μ s
t _f	Fall Time			0.2		μ s

◆ h_{FE} Classifications

O	P	Y
50-80	80-130	130-180

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