

isc Silicon PNP Power Transistor

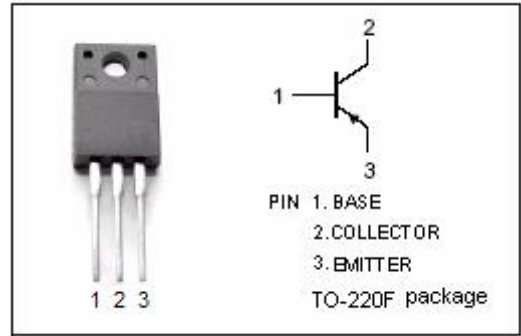
2SA1837

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -230V(\text{Min})$
- High Current-Gain Bandwidth Product
- Complement to Type 2SC4793
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

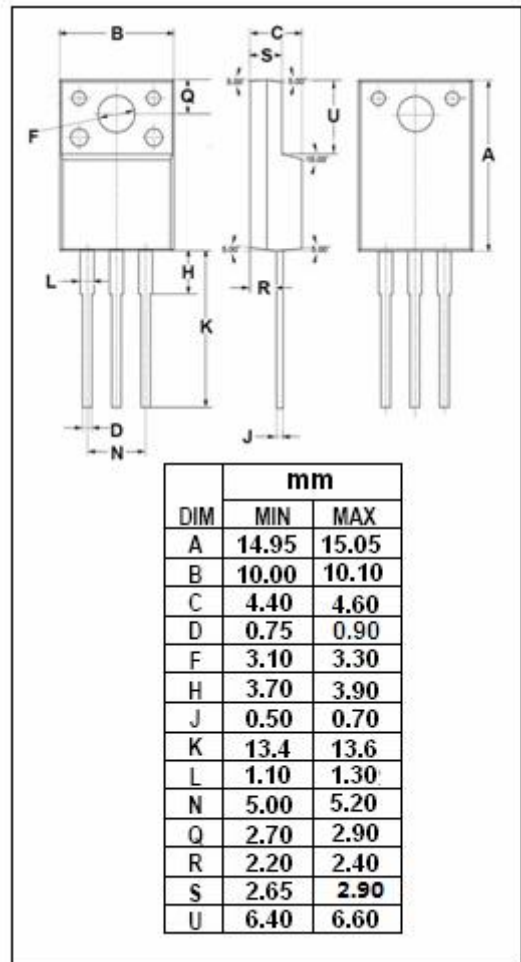
APPLICATIONS

- Power amplifier applications.
- Driver stage amplifier applications



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-230	V
V_{CEO}	Collector-Emitter Voltage	-230	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-1	A
I_B	Base Current-Continuous	-0.1	A
P_C	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	20	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SA1837****ELECTRICAL CHARACTERISTICS****T_j=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA ; I _B = 0	-230			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -500mA; I _B = -50mA			-1.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -500mA ; V _{CE} = -5V			-1.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -230V ; I _E =0			-1.0	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C =0			-1.0	μ A
h _{FE}	DC Current Gain	I _C = -100mA; V _{CE} = -5V	100		320	
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		30		pF
f _T	Current-Gain—Bandwidth Product	I _C = -100mA ; V _{CE} = -10V		70		MHz