

isc Silicon PNP Power Transistor

2SB747

DESCRIPTION

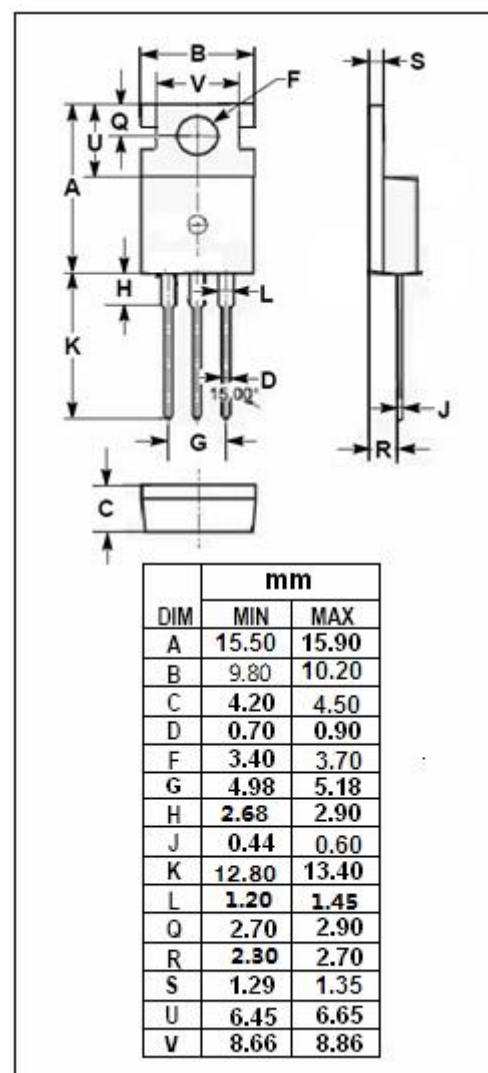
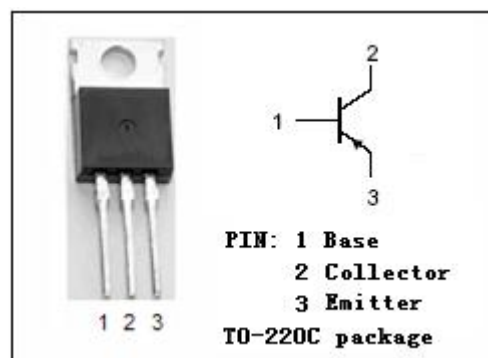
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -80V(\text{Min})$
- Good Linearity of h_{FE}
- Wide Area of Safe Operation
- Complement to Type 2SD812
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High power amplifier applications.
- Suitable for 15~20W home stereo output amplifier and voltage regulator.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-5	A
I_{CM}	Collector Current-Peak	-8	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	40	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SB747****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 = -3A; I _B = -0.3A			-2.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -3A; V _{CE} = -5V			-1.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -80V; I _E = 0			-50	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -3V; I _C = 0			-50	μ A
h _{FE-1}	DC Current Gain	I _C = -20mA; V _{CE} = -5V	20			
h _{FE-2}	DC Current Gain	I _C = -1A; V _{CE} = -5V	40		200	
h _{FE-3}	DC Current Gain	I _C = -3A; V _{CE} = -5V	20			
C _{OB}	Collector Output Capacitance	I _E = 0; V _{CB} = -10V; f= 1MHz		190		pF
f _T	Current-Gain—Bandwidth Product	I _C = -0.5A; V _{CE} = -5V		7		MHz

◆ h_{FE-2} Classifications

R	Q	P
40-80	60-120	100-200

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